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A.W.BRØGGERS BOKTRYKKERI A/S



## Preface.

Through my previous studies on Semitic linguistics ("Akzent und Vokalismus im Althebräischen", Oslo 1940, "Altarabische Pausalförmern", Oslo 1940, and "The Syriac phonematic vowel systems" in "Festschrift til Olaf Broch", Oslo 1947) I have tried to introduce the modern "structural" method into this field of linguistic research. As far as I can see, the method has proved very useful. It has even appeared successful when applied to investigations of old problems under discussion. The present booklet represents an attempt at utilizing the same method on the study of some main features of the history and the structure of the Arabic spoken in Egypt today. Half a year's stay in Egypt (chiefly in Cairo) has made it possible for me to get a direct knowledge of the dialect. Without this knowledge the present treatise could not have been written.

I wish to express my great thankfulness to the Norwegian foundations, especially the "Norges almenntvitskapskapelige forskningsråd", without the generous economic assistance of which my stay in Egypt would have been impossible. Further I am very much indebted to all the Egyptians who met me with sincere hospitality and helpfulness, and they were many. Special thanks I owe my friend Dr. Buṭrus 'Abd al-Malik, Professor at the American University at Cairo, for many inspiring conversations and discussions and for his great personal kindness. I also wish to express my gratitude to the other professors at the School of Oriental Studies at the American University at Cairo for all the favours they did me.

To the Norwegian Consul General in Cairo, Mr. Stener Vogt,  
I am indebted in a particular way. The numerous excellent services  
he rendered me extremely facilitated my studies.

I am only too conscious of the shortcomings of the booklet I permit  
myself to present to the students of Semitic linguistics. But I hope  
that it may increase the interest in scientific studies of the Arabic dialects.

Oslo in September 1951.

Harris Birkeland.

## Introduction.

That Arabic is the national language of Egypt is a consequence  
of the Islamic conquest in the 7. century A. D. Before that time Coptic,  
which represents a development from the Old Egyptian language, was  
the spoken language and, besides Greek, the literary language, too.  
This statement is a radical abbreviation of the historical facts. It is,  
however, sufficient for our purpose. Not before the 17. century Coptic  
totally disappeared and, as a consequence, the arabization was completed.

Through the Islamic conquest not only Egypt but also Iraq, Syria,  
Palestine, and the whole of North-Africa were arabized. In all these  
countries people are now speaking different dialects, the distance of  
which from the classical Arabic is partly rather long. But the latter  
language is still, with certain modifications, the literary language and  
is, therefore, a strong unifying force in the Arabic world. Taken into  
consideration its character of a religious language it unifies to a certain  
degree even the whole Islamic world.

The classical Arabic had got its fixed form as early as before  
the time of the prophet Mohammed, being a common language for  
all tribes and being used in poetry and more solemn prose. That  
the classical Arabic, the 'Arabiya, must be regarded as a kind of an  
artificial language was shown by me in my "Altarabische Pausalformen",  
Oslo 1940, and after me independently by R. Blachère in "Le Coran",  
Paris 1947-51, pp. 156 f. It was a *koiné* of the Arabic tribes and  
principally not more artificial than every literary language. It seems  
that all the present Arabic dialects have developed just from this

*koiné*. But the development can scarcely have been direct, and there  
are cases in which special dialects seem to form the foundation of special  
phenomena. Possibly a later stage of the *koiné* forms the common starting-  
point of the dialects. That can only be ascertained through thorough  
investigations of the different dialects, not through vague hypotheses.  
The present paper pretends to be an attempt of making such an



investigation of the Egyptian dialect. As will be understood, I do not wish to give a *description* of the language. Only some important topics, which are interesting from a structural point of view, will be treated. The future purpose must be similar treatments of the other chief Arabic dialects. And then the question of their common relation to the 'Arabiya and the old dialects can be taken up.

The Egyptian Arabic dialect (abbreviated in this paper to Eg.-Ar.) is spoken by the Arabic country which has the greatest population. Very early it has been the object of descriptions. Fundamental is Dr. Wilhelm Spitta-Bey, *Grammatik des arabischen Vulgärdialekts von Aegypten*, Leipzig 1880, which contains a complete grammar and selected texts besides valuable references to the 'Arabiya and comparisons with that language, but, of course, no attempt at tracing the different *s'ages* of the history of the dialect. Later Vollers, Willmore, Spiro, a. o. have investigated and described the dialect. The works of all these scholars are more or less determined by the view-point that the 'Arabiya forms the ideal fundament of the spoken dialects.

Quite modern is the excellent text-book by W. H. T. Gairdner, *Egyptian Colloquial Arabic*, London 1926, and his "The Phonetics of Arabic", London 1925. Both books utilize recognized methods in phonetics and transcription. Also E. E. Elder, *Egyptian Colloquial Reader*, London 1927, presents his material in modern transcriptions. The last three books are published by the American University at Cairo, where they are used as text-books. All of them are excellent, based as they are on modern phonetics. The same cannot be said of the *Lingua-phone Course of Spoken Egyptian Arabic*. The transcriptions of the texts in this book do not show any traces of knowledge of modern phonetics. Only one instance sufficiently demonstrates this fact: An originally *long* vowel which is now shortened, is still noted as *long* in this book. And there are several other evidences of an incomprehensible influence from the literary language. In addition, the text and the records do not always correspond.<sup>1</sup>

<sup>1</sup> In fact, the discrepancies between text and record are often rather disturbing. The London Office of the Linguaphone Institute informs me that mistakes of that kind are going to be corrected. But the same Office assures me that no attempt will be made to bring the transcriptions in accordance with recognized methods. The Office apparently regards practical phonetic exactitude as a kind of whims invented by specialists! Would the same Office appreciate a transcription of modern English representing the pronunciation of Shakespeare's time?

## I. Pausal origin of Egyptian Arabic forms.

The classical Arabic language, the 'Arabiya, shows a marked difference between forms in context and pause. This topic has been treated by me in "Altarabische Pausalformen", Oslo 1940. That the difference between pause and context is based upon a linguistic reality in the spoken Old Arabic dialects cannot be doubted. The following definition of a pausal form may suffice for our purpose: The pausal form of a word is the form it shows when it is spoken alone, in opposition to the form it shows when one or more words follow immediately. From this definition it is clear that pause must be a *relative* notion. For it is a matter of opinion whether a word must be said to follow another word *immediately* or not.

Common to the pausal forms of the 'Arabiya was that all of them ended in a *long* syllable, i. e.: the final sound was a *long vowel* or a *consonant*. No *short* final vowel appeared in the 'Arabiya in pause. Those final short vowels which occurred in context, were either dropped, or a consonant, mostly *-h*, was added to them in pause. Examples: *qatala* became *qatali*; *qi* (imperative of *waqā*) became *qih*; *qatalā* was preserved.

In the indefinite *singularis* of the noun also the *-n* of *-un*, *-an* was dropped together with the *-u* of the nominative and the *-i* of the genitive, whereas the *-a* of the accusative was lengthened. The forms *kalbun*, *kalban*, *kalbin* in context, therefore, became *kalb*, *kalbā*, *kalb* in pause.

The ending *-at-* of the fem. sg. st. abs. became *-ah* in pause.

These are the most important pausal phenomena. As to the other peculiarities met with in the pausal forms of the 'Arabiya I have to refer to my study just mentioned.

In the last chapter of "Altarabische Pausalformen" (pp. 100-106)

I have treated the problem of pausal forms in context. Owing to the relative character of pause the pausal form might as early as in the



'Arabiya sometimes occur in context, and this development has continued in the dialects. Some of them still show a slight difference between pause and context, but mostly this difference has been given up; see my book p. 105.

In the present study I only consider the Eg.-Ar. dialect. My purpose is to trace its development through different historical stages. A *stage* is then a certain, synchronic linguistic system with well defined structural rules distinguishing it from the other stages.

It is to regret that the question whether the dialectal forms have developed from pausal or contextual forms has never been asked. It is a fact that the Eg.-Ar. dialect of today does not show a single trace of the old difference between context and pause in morphology. The only special pausal phenomena occurring are of a pure phonetic character and are mostly not perceived by the speakers. That the dialect has as its historical basis a linguistic system in which the difference between pause and context was a reality, cannot be doubted. This difference cannot, of course, have been annulled suddenly. *What has happened is that the pausal forms successively have gained the victory.* The result shows that this is the only theory possible. Typically contextual forms do not exist except as relicts and in cases in which pausal forms were impossible, e. g. in the *status constructus* of the fem. noun. All other present dialectal forms have as their basis old *pausal* forms. It is very important that this fact be kept in mind. Else the historical development leading to the linguistic system of today is unintelligible. The chief mistake of scholars who have been treating questions of Eg.-Ar. morphology is above all that they have not seen this fact or at least not utilized it as the theoretical basis of their investigations. The fact itself should be evident enough when only it is mentioned. For when two different forms of a word existed and the dialect only has *one* form, one has to ask which of the two forms is the one still surviving. The answer is not dubious. It is always the pausal form which survives.

Now it is impossible for scholars of today to follow the development *before* the pausal forms had substituted the contextual ones. We must assume a *Stage I*, in which we suppose that this process is completed and then try to reconstruct the subsequent stages of the linguistic history. In those stages we only assume one kind of forms,

viz. pausal forms. Whether special contextual forms have existed in these stages too, is impossible to decide. But the result was at least the complete victory of the pausal forms. And even if our construction of stages previous to the modern dialect should be an abstraction, in so far as we do not know if special contextual forms still existed, we must be content with a construction only of pausal forms in every stage, because those forms are the only forms which we are able to deduce. A reconstruction of a previous linguistic stage is always more or less an abstraction. But so is a description of a living system, too. Nay, as a matter of fact, all thinking is abstraction. The aim in our case is to understand the successive development up to our days through different *structures*, even if these structures should happen to exclude existing contextual phenomena.

All scholars agree that final vowels which were originally short have been dropped in the Eg.-Ar. dialect. The forms originating in this way correspond completely to the Old Arabic pausal forms; e. g. *al-walad* 'the boy', *darab* 'he struck' etc. But how to explain the fact that a few final originally short vowels still exist? Let us take the personal pronouns *hūwa* and *hiya*,<sup>1</sup> in which doubtless the final *-a* has never been long! Just these and similar words show that old *pausal* forms must be assumed as basic for the understanding of the modern forms. For the most frequent pausal forms of these two words were in the 'Arabiya *huwah* and *hiyah*. Those forms could survive because the last syllable was *long*. That they have lost their *-h* is a problem which must be solved in connection with the loss of other final postvocalic *-h*'s; see below.

Besides the pausal forms *huwah* and *hiyah* also *hū* and *hī* occurred; see my 'Altarab. Pausalformen', p. 39. Those forms occur in Eg.-Ar. after some words; see Spitta-Bey, Gr., p. 73 f. By the way, the words which are noted *ahū* and *ahī* by Spitta-Bey, occur as *ahō* and *ahē* in Gaidner's texts; cp. below p. 47 what is said about the relation between *i:ē* and *ū:ō*.

The conservation of originally short final vowels of words like *hūwa* and *hiya* cannot be explained otherwise than is done here. The whole problem is bound up with the Old Arabic phenomenon

<sup>1</sup> The mark of accentuation is in this paper placed *before* the accented syllable.



which is called pausal *-h*, in Ar. *hā' as-sakt*, *hā' al-waqf*, or *hā' mawqūf*; see my "AltArab. Pausalformen" pp. 31 ff. and cf. the chapter on the endings *-t* of the fem. sg. pp. 96-98. By means of this *-h* the 'Arabiya was able to keep short final vowels in pause. Such forms, then, were preserved until our days, or, more correctly, until the *-h* was dropped at a time when short final vowels were possible.

In the 'Arabiya the pausal *-h* was necessary in monosyllabic words with a short vowel, e. g. in the demonstrative pronouns *dih*, *tih* etc. The pronoun *dih*, *dī* still exists in Eg.-Ar. in the form *dī*. This word may go back upon *dī*, but most probably the pausal form *dih* forms the basis. The Eg.-Ar. pronoun, therefore, sounded *dih* until the *h* was dropped. But even as late as nowadays the *-h* may occasionally be heard in pause.

How will scholars explain the preservation of the *-a* in the pronominal suffix *-ya* after long vowels, as in *a'biya* "my father", if they do not assume a pausal form *-yah* as a basis? Manifestly the *-a* has never been long, so that the present form is inexplicable without the assumption of a pausal *-h*.

In the same way the short final vowels of the suffixes *-ka* and *-ki* after vowels must be interpreted. For it is not probable that they go back upon so old forms that the final vowels were long. The final vowels of the suffixes mentioned are dropped after consonants. In such a position the vowels appear *before* the *-k* as auxiliary vowels. The usual explanation that the *-k* and the following vowel have changed their places is too home-made to be maintained. We must keep to phonetic rules positively known. But in any case the vowels are preserved after long vowels. Then *a'būka* must be derived from *abūkah* and *a'būki* from *abūkih*. We must be allowed to advance further and conclude that in *bētak* < *\*bētakā* it is the accusative which is preserved, in *bētik* < *\*bētikī* it is the genitive. The fact that an old case-ending appears as an auxiliary vowel is well-known. And that the quality of this vowel is determined by the following vowel is quite natural. As a consequence of this development in all nouns the suffixes in question obtained two forms, *-ka*, *-ak*, and *-ki*, *-ik*. This is a synchronic fact valid in the present dialect: After consonants *-ak*, *-ik*, after (long) vowels *(-ka)* *(-ki)*.

Also the final vowels of the independent personal pronouns *'inti*, *'ihna*, *'humma* must be assumed to originate from forms with short final vowels. If they ever were long, they were shortened so early that they could not be preserved in the dialect without the pausal *-h*.

The most fatal consequence of the disappearance of special contextual forms was the dissolution of the classical nominal and verbal flexional system. The case-endings of the determinate forms of nouns consisted of short vowels which, of course, were elided. The same holds good for short final vowels of the verbal *modi*. But one problem still remains, viz. the indeterminate nouns: In the dialect not only the case-endings *-un* and *-in* have disappeared, as they did in the classical language in pause. The ending *-an* of the indeterminate accusative, which in the classical language in pause of the masc. nouns became *-ā*, has also disappeared. And it is *not* the classical ending *-ā* that is elided, since long final vowels have only been shortened, so that *-ā* in that case should have become *-a*. The dialectal indeterminate accusative with no ending has its root in a linguistic system where *-an* in pause had the same fate as *-un* and *-in*. And we positively know that there were Old Arabic dialects representing this phenomenon; see my "AltArab. Pausalformen" p. 47. On this point the dialects have not developed directly out of the 'Arabiya.

The oldest stage of the Eg.-Ar. which is no more Old Arabic, must have been a linguistic system where every word ended in a long vowel or in a consonant. Thus no word ended in a short vowel. But in the modern dialect words occur which really end in short vowels representing *old* short vowels *not* preserved by means of the pausal *-h*. In the present linguistic system such endings do not present any problem at all, since there are lots of words ending in short vowels. But these short vowels go back upon old long vowels which at a certain time have been shortened. How then to explain the preserved *originally* short vowels? Before the shortening of the old long vowels they were structurally impossible. There are, e. g., old case-endings which are preserved in certain formulas. Spitta-Bey, Gr. pp. 50 and 150, mentions expressions with the (contextual) genitive of *ayy*, like *min ayyi gihatin kān* "from which ever side". Phenomena of this kind can be explained so that the case-ending *-i* might be regarded as an auxiliary vowel, so that it could be preserved even in a system where no case-endings



existed. Principally *ayyi gīḥatin* then must be interpreted as *one* word. Grammatically the whole phrase represents a relict; otherwise the genitive *-in* would also be elided, although it was structurally tolerated in every stage.

Phrases like the one mentioned may, however, also be explained in another way, viz. as *loanwords* from the literary language. This language has been a living reality through all historical stages. As a matter of fact, it is often impossible to decide whether we have a relict or a loan from the literary language. In the cases with the genitive of *ayyi* we apparently have a relict, since the expressions are in common use in all social classes. If we do not explain the short vowel ending as an auxiliary vowel, but interpret the expressions as loans from the literary language, these loans cannot have taken place before the linguistic system permitted short final vowels, i. e. after the shortening of originally long final vowels; cp. below p. 25.

Similar, but not identical, arguments hold good for forms which have preserved the contextual accusative ending *-an*, such as *'dā'imān* "ever", *'āḥadan* "never", *'ḥālan* "immediately", *ḥa'n* "an good luck", *'awwālan* "firstly"; see Spitta-Bey, Gr. pp. 50 and 150. These forms are most probably relicts, which were preserved because they were regarded not as accusatives, but as adverbs. Contrary to forms like *ayyi* they (just as *gīḥatin*) were in accordance with the linguistic system, since they ended in a consonant. Perhaps the formula *ahlan wa-sahlan wa-marḥaban* belongs to relicts of the same type.

But then we have contextual flexional endings in words and expressions where it seems probable that they must be regarded as literary *loanwords* in the colloquial. Above all some expressions from the religious sphere are to be mentioned. We have e. g. *a'ūzu bi'l'lāh* "may God protect me!", *fi-amāni-l'lāh* "under the protection of God", *'ala barakati-l'lāh* "God will bless it for you", *b-iṣni-l'lāh* "with God's permission", *bi'l'lāhi* besides *bi'l'lāh* "by God", *wal'lāhi* besides *wal'lāh* "by God", *al-ḥamdu li'l'lāh*, etc.

All these expressions grammatically fall outside the system of the colloquial, but they might have been tolerated in a system where short final vowels did not exist, if their case-endings were regarded to be auxiliary vowels. Only *bi'l'lāhi* and *wal'lāhi* are exceptions, when nothing follows immediately. If these two words are really spoken

with *-i* no other explanation is possible than the one that they have been introduced from the literary language so late that the colloquial had short final vowels as a result of shortening of originally long final vowels. The genuine dialectal forms are *bi'l'lāh* and *wal'lāh*, which, as we know, really exist.

That, in fact, the religious expressions mentioned are of a literary origin and cannot be regarded as relicts, can be positively demonstrated. In *a'ūzu bi'l'lāh* and *b-iṣni-l'lāh* the *s* corresponds to Old Arabic *ḍ*. But in the dialect the correspondence is not *s* but *ḍ*! The correspondence *s:ḍ* is characteristic of words secondarily introduced from the literary language; see below p. 54 ff. Thus these two expressions are literary loans, and there is no indication that the other expressions must be interpreted otherwise.

The nominative *-u* which is sometimes heard in *(as)-salāmu 'alēkum* is likewise late and literary.

A curious literary word is *ḥaqqā* "truly", noted by Spitta-Bey, Gr. p. 50. For *ḥaqqā* is the pausal form of *ḥaqqa* in the 'Arabiya. But the Eg.-Ar. has its origin in a pausal system, where the form of the indeterminate accusative had no ending; see above on p. 13. In addition it must be emphasized that even phonetic reasons simply prohibit the supposition that *ḥaqqā* should be a relict. For every originally long final vowel is *shortened* in the dialect. The long *-ā* noted by Spitta-Bey is, therefore, impossible. If, consequently, *ḥaqqā* really exists, which I have had no opportunity to verify, it must be a loanword from the written language. And it must have been introduced after the shortening of originally long final vowels, since its *-ā* is not shortened in the transcription of Spitta-Bey. But then the *-ā* must be *stressed*; see below p. 29. Spitta-Bey does not tell us anything expressly about that. But it appears from his accent rules on p. 60 that a long final vowel is not stressed. His rules are not correct. But he simply seems to mean that the word is pronounced *'ḥaqqā!* Then the *-a* must be *short*. The borrowing from the literary language must have taken place *before* the shortening of long final vowels, since the *-a* is shortened. I cannot solve the problem, because I have not heard the word.

Thus the assumption that old pausal forms must constitute the basis of the present Egyptian colloquial is confirmed from several



angles. The exceptional contextual forms are relicts or literary loan-words. That such words especially belong to the religious sphere was to be expected. Now pure linguistic reasons have confirmed the view. We may call these words "biblical" words and expressions.

A most interesting evidence of the pausal foundation of the colloquial is found in some few cases where originally *long* final vowels are dropped. So the frequently used 'āl "excellent" must be explained. Its Old Arabic equivalent is with the *tanwīn*: 'ālin < \*'āliyun. In the 'Arabiya the pausal form would be 'ālī or 'āl. The latter form had as a basis the contextual form 'ālin < \*'ālin, in which word the ending -in was elided like the *tanwīns*. Such an elision could only take place in pause, not in context. The topic has been treated by me in my "Altarab. Pausalformen" on pp. 68 ff. The reason why I mention it here is only to show that *pausal* forms are basic for the understanding of the Eg.-Ar. dialect.

Spitta-Bey, on p. 50, also mentions *g'īwār* < *g'āwārī*. The explanation is quite simple. We have the pausal abbreviation. In the same way we easily explain 'awāf < 'awāfī. As to all these phenomena I refer to my "Altarab. Pausalformen" pp. 68 ff. It must be emphasized that they cannot be explained when we do not regard the words as pausal forms. That a form like *mās* < *māsā* "razor" should be explained in the same way, seems a bit difficult, since -ā usually is not elided even in pause; see my book on p. 72 f. But it is in any case impossible to explain the form without assuming a pausal basis of the dialectal word.

Spitta-Bey mentions in the same connection 'ā'a < *tā'āla*. I have not heard this word, but it may, of course, occur. Personally I always heard *tā'āla*. That *ummāl* "indeed" should be derived from *immāla* is possible. But then we have another instance of a pausal shortening and a consequent elision of -ā.

Conclusively we state: It can scarcely be denied that the Eg.-Ar. forms must be derived from Old Arabic *pausal* forms. The few extant relicts from contextual forms have been adapted to the linguistic system in question, and their case-endings have been regarded as auxiliary vowels. Their linguistic function has disappeared.

## II. Chronology of the development of the Egyptian Arabic dialect.

In the preceding chapter we could prove that the Eg.-Ar. dialect goes back upon a system in which the pausal form of the indeterminate masc. accusative was not -ā, but zero. It may happen that other divergences between the 'Arabiya and the dialects occur. But, as already mentioned, in most cases the basis of the present dialects in the classical language is relatively safe.

The development leading from the Old Arabic linguistic system to the present dialect must have gone through different successive stages. But no attempt has as yet been made to reconstruct any strata or structures prior to the present dialect. It is, of course, a difficult task. Above all it is necessary to try whether it is possible to state a relative chronology of some of the linguistic changes which have taken place. That such a statement really is possible is now going to be demonstrated.

We know that an old final glottal stop (Arab. *hamza*) has disappeared in the Eg.-Ar. (after long vowels). Further we know that a preceding long vowel has been shortened. Thus *hulafā* has become *'hulafā*. From these facts we are able to deduce that the shortening of the vowel must have taken place *after* the elision of the *hamza*. Else it would be completely impossible to understand why the ā of e. g. *hulafā* has been shortened, while the ā of e. g. *kitāb* has not been shortened, with the consequences that the last syllable of *ki'tāb* is stressed, whereas the last syllable of *'hulafā* is not stressed. Now we know that in the Eg.-Ar. every old final long vowel is shortened. Thus we get the following rule of relative chronology:

*The shortening of final long vowels must have taken place after the elision of final hamza.*

An investigation of the problem of the final (non-radical) -h's will lead to further results on the field of the relative chronology of certain linguistic changes.

We know that the ending of the st. abs. fem., which is now -a, once must have been -ah with a pausal -h; see above p. 9. As long as this ending was -ah the linguistic system did not permit any word



ending in a short vowel. Every word ended in a long vowel or in a consonant. A word *malika* was impossible in this system. It is possible only within a system where short final vowels are permitted. And such a system came into existence as a consequence of the shortening of the old long final vowels. Now it is quite sure that the *-h* of the fem. *-ah* does not exist in the present dialect. The following deduction is, therefore, permitted:

*The elision of the -h of the fem. ending -ah must have taken place after the shortening of old long final vowels.*

Further steps are possible. All scholars agree that there is no *h* in the objective and genitive suffix of the 3. p. m. sg. after short vowels. Thus *ki'tābu* "his book" and "*yikūbu*" "he writes him (it)" do not contain any *-h*. Generally the development is held to be the following: *\*kiābhu* (> *\*kiābuh*) > *kiābu*; *\*yikūbhu* (> *\*yikūbuh*) > *yikūbu*. In any case the *h* is dropped now. This fact is no problem. After long vowels, however, the suffix *-h* is still noted by modern scholars. Thus they note e. g. *a' bāh* "his father", *yikū' bāh* "they write him (it)". But the linguistic facts are not quite so simple. Also this *-h* seems to have been elided. It is very hard to detect it in speech. Very able Arabic scholars in Egypt whom I questioned, admitted that the *-h* only exists *fi-l-fih* "in the mind". Spitta-Bey, it is true, was still able to hear the *-h* of the suffix spoken in some cases, especially by peasants. But even he admits that it has no function any more, and that the pronunciation *without* the *-h* is quite as good as that *with* the *-h*. He also points out the fact that in dialectal prints the suffix occurs without any *-h*; see Spitta-Bey, Gr. p. 74 f.

These contradictory facts do not allow more than one interpretation. The *-h* of the suffix has lost its function also after long vowels. It may still be heard. But that happens easily as a pausal phenomenon even when the *-h* has no etymological basis. On p. 29 of his "Phonetics" Gairdner has described this *-h*, which in final position often appears voiced. To Gairdner's phonetic descriptions must be added that the *-h* has no function any more. There is no opposition between words with an original *-h* and words in which this *-h* is a mere aspiration of a final vowel. In few words: A final (non-radical) *-h* is no more a special *phoneme* in the Eg.-Ar., although

it may occasionally occur as a phonetic pausal phenomenon.<sup>1</sup> "They write him (it)" must be transcribed *yikū' bāh*, not *yikū' bāh*; "his father" is *a' bāh*, not *a' bāh* etc.

That this conception of the final *-h* after long vowels really is correct can be demonstrated by the fact that no *h* is heard when the following word begins with a vowel, e. g. *a' lā aho* "they said to him: here it is" is never pronounced *\*alāhah*. When Spitta-Bey heard *bi-yu' rih-lak* "he shows it to you" with short *i*, a real pronunciation of the *h* is, of course, still a fact. Here the preservation of the suffix *h* has produced the shortening of the preceding vowel, since every vowel is short before two consonants. I should think the pronunciation with *-h* in such cases is still usual. But that does not mean that the suffix *-h* is preserved. For *yu' rih* formed one word with *lak* a long time even before the shortening of long final vowels (see below p. 25) and a still longer time before the ending *-h* of the suffix after a long vowel was elided. As a matter of fact, this elision belongs to the latest stage of the linguistic history of Egypt. Perhaps it is still not accomplished.

Only the theory that the suffix *-h* has been elided is able to give a plausible explanation of the different suffixed forms. Now, as already mentioned, everybody admits that elision after a consonant: *\*kalbhu* > *kalbu*. An intermediary stage *\*kalbuh* with a consequent inversion of *h* and *u* is generally supposed. But the disappearance of an *h* after a consonant is excluded. The suffix *-ha* of the fem. always keeps its *h*. And if there had been any *h* immediately after the consonant we should expect a shortening of a preceding long vowel, so that, e. g., *\*kiābhu* should become *\*ki'tābu* with long *a*! The supposed inversion of *h* and *u*, so that *-hu* should become *-uh*, is a mere supposition. One might use the suffixes *-ak* and *-ik* as evidences. But they have developed from the pausal endings *-akah* and *-ikih*; see p. 12. Just in the same way *ki'tābu* must be derived from *ki'tābuh*, the pausal form of *kiābuhā*.

It follows that the suffix *-h* has been elided both after a long vowel and after a short vowel. But then the question of the relative

<sup>1</sup> See the definition of the *phoneme* below p. 45.



chronology arises. This question must be solved in connection with the corresponding question of the *-h* of the fem. noun.

By a lucky chance we are able to solve the question as to the relative chronology of the elision of the fem. *-h* after long vowels. We have, as far as I know, only three words of that kind. These words are *ṣāla* < *ṣālāh* (pause) "prayer"; *zāka* (< *zakāh*) (pause) "alms"; and *ḥāya* < *ḥayāh* (pause) "life". Just because the last vowel of these words was long and is now short, it appears that the elision of *-h* must have taken place before the shortening of long final vowels. Else the vowel would not have been shortened. For there was no reason for shortening a vowel before one consonant. We have the same phenomenon as in *ḥulafā* < *ḥulafā*. Consequently we obtain the following relative chronology:

1. The elision of final *hamza* and the *-h* of the fem. words after a long vowel.
2. The shortening of long final vowels.

Now the elision of the suffix *-h* after a long vowel had as a consequence that the words in question ended in a stressed long vowel. The vowel was *not* shortened and unstressed as in *ḥulafā*, *ṣālā* etc. The reason must be that the suffix *-h* after a long vowel was elided *after* the shortening of long final vowels. That goes very well with the fact that this elision is perhaps not yet completed.

The only difficulty connected with our problem is that personally I heard *ḥa'yā* instead of *ḥāya* noted by Spitta-Bey. This fact can only be explained so that *ḥa'yā* must have been introduced from the literary language at the same time as a word like *aš'yā*, i. e. *after* the elision of the suffix *-h* after long vowels; see below p. 29.

But the relative chronology of the elision of the suffix *-h* after short vowels still remains. This elision evidently must be seen in connection with the elision of the fem. *-h* after short vowels and on the whole in connection with the numerous pausal *-h*'s after short vowels. There are no traces of these *-h*'s any longer, except in a few cases in pause, e. g. in *dih* in pause. They, therefore, must have been dropped *before* the suffix *-h* after long vowels. But on the other hand they must have been dropped *after* the shortening of long final vowels. For before that time short final vowels were impossible, since every word ended in a consonant or a long vowel.

The shortening of long final vowels had not taken place in the 14. century. For the Arabic which was introduced into Soudan at that time, still had long final vowels; see below p. 26. Consequently the *-h* of words like *malikah* and *kitābuh* must have been elided *after* the 14. century.

Conclusively it must be stated that the elision of *-h* has taken place in three different stages:

1. The elision of the final *-h* of the fem. after long vowels before the shortening of final long vowels.
2. The elision of the *-h* of the fem. after short vowels, the *-h* of the suffix after short vowels, and every pausal *-h* after short vowels.
3. The elision of the suffix *-h* after long vowels.

The final result seems to be the elision of every final (non-radical?) *-h*, except as a mere phonetic phenomenon. In this way the curious *-h* which often is noted in *gīh* "he came, went", may be explained. It is not radical, and it is not always heard. As a purely phonetic phenomenon, however, it is intelligible. The difficulty remains why the *i* is short, since the classical equivalent is *gā'a*, which ought to become *\*gā* > *\*gī* (under the influence of *gī'ta* > *\*gīt*); to this problem see below p. 43.

Even radical *-h*'s seem to disappear. That is at least the case in the word *'fī'i* "teacher" (< *\*fīqīh*) < *faqīh*. This word must have followed words like *'ṣala* < *ṣalāh*, since it shows precisely the same pattern, only with the vowels *a-i* (which become *i-i*: *faqīh* > *\*fīqīh*) instead of *a-a*. Similarly the *h* of *waḡh* "face" has been assimilated to the *ḡ*, so that the word sounds *wiṣṣ* < *\*wiḡh* < *waḡh*; cp. below p. 54.

On the basis of the above arguments we may reconstruct the following stages of development:

*Stage I.* All words had the pausal form of the 'Arabiya, the few relicts excepted, where the short final vowels were regarded as auxiliary vowels. Every word ended in a consonant or a long vowel.

Just as in the 'Arabiya stress or accent (in this paper used in the same meaning) must have been completely irrelevant, i. e. accent cannot in itself have differentiated the meaning of words which in other phonetical particulars were identical, since accent must have been totally dependent on quantity. Only the latter was semantically relevant. The opposition between *malik* and *malik* only consisted in the opposition



between short and long *a*, the opposition between *qutūl* and *qutāl* only in the opposition between long and short *u*. We are, in fact, able to proceed farther. In the same way as we regard the sounds and words of the 'Arabiya as the basis of the present language spoken in Egypt, so that we start with the former to understand the latter, we must regard a supposed accent in the 'Arabiya as a basis to understand the modern accent. If we keep to this irrefutable pre-supposition, it can be demonstrated that the 'Arabiya cannot have had any accent at all, not even as a phonetic phenomenon. Nouns ending in *-ā* + case-endings, and fem. nouns in *-āh* (pause) form the evidence: *ḥulafā'*, *ṣalāh* etc. In the present dialect such words are accented on the first syllable. But this would have been unintelligible if there had been any accent at the time when the final *hamza* and *-h* still were pronounced, which, of course, was the case in the 'Arabiya and in Stage I. If there had been any accent at that time the words in question would have been accented on the last syllable in the present dialect, precisely in the same way as all other words are accented on the last syllable when they end in a long vowel + a consonant, e. g. *kitāb*, *bilād* etc. Thus an accent cannot be assumed for the 'Arabiya and for Stage I, if this accent shall form the basis of the historical development. The latter condition is necessary for every scientific linguistic research. The problem will be taken up for special investigations below p. 32 f.

But Stage I soon was superseded and substituted by Stage II. In this stage every original final glottal stop (*hamza*) and the final fem. *-h* after long vowels were elided. E. g. *'ašā* "dinner" became *'ašā*; *ḥulafā* "caliphs" became *'ḥulafā*; *ṣakāh* "alms" became *'zakā*.

The structure of the endings of words remained the same as in Stage I: Every word ended in a long vowel or in a consonant.

A word accent of the same kind as the accent of today, the assumption of which was impossible for Stage I, has in Stage II become possible, owing to the elision of final *hamza* and final fem. *-h* after long vowels, elisions which lead to the result that the previously closed final syllables of the words in question now became open. From Stage II on it is, therefore, possible to understand that e. g. *'zakā* has got the stress on the first syllable. From the fact that a special accent in addition to the emphasizing of a syllable through

quantity is possible it cannot be deduced that this accent really came into existence. Only from Stage IV on is the assumption of such an accent necessary, as will be demonstrated below p. 26 f.

But an investigation of the modern, traditional accent of the literary language, especially as read by the recitators of the Koran, seems to indicate that an emphasizing of a special syllable of a word by means of an accent or a stress (possibly also a secondary stress) really was introduced in Stage II. This will be demonstrated below p. 33 ff. The accent must have been entirely determined by quantity by the following rules:

1. The last long vowel of a word got the stress: *kitāb* "book". A final long vowel is, however, excepted: *'amū* "they rose". A preceding length may have had a secondary stress: *šabā'ib* "windows". But this secondary stress, which is shown by modern readers, may also be due to the effort of avoiding the shortening of the unstressed long vowel by modern speakers who do not know unstressed long vowels.

2. If there were no such long vowel as mentioned in 1., the last closed syllable was stressed: *'ka'tabū* "you wrote". But the last closed syllable of a word was stressed only when it was doubly closed: *ka'tabt* "I, you wrote". If there were no such closed syllable the first syllable of the word was stressed: *'kātab* "he wrote".

3. The stress was confined to the three last syllables of the word. Thus nothing prevented the stress on the antepenultima in words like: *'kalabū* "they wrote", *'ābadan* "never" etc. But this stress on the antepenultima requires a special attention.

In forms of the type *'iq'talū* the stress, of course, must be *'iq'talū*, since the stress cannot advance further than to the antepenultima. But in *iq'tal*, which according to rules 2. and 3. ought to be stressed on the first syllable, the stress in transcriptions of the present dialect is generally noted *iq'tal*. This might be explained so that the first syllable contains a *hamzat al-waṣl* and, therefore, cannot be stressed. But the *hamzat-al-waṣl* does not seem to constitute any exceptional kind of syllables in the colloquial. This is demonstrated by the dialectal stress of the imperative of the sg. masc. in the I. form: *'ifīh*, *'uḥrug*, not (at least not usually) *ifīh*, *uḥrug*. Thus it can scarcely be maintained that a *hamzat al-waṣl* is the cause of a stress



*iq'tatal*. One might object that *iftah*, *uhrug* could not be stressed on the last syllable since it is not doubly closed. But that argument is invalid, since we know cases of secondary doubling of a final consonant when the syllable was stressed: *ta'manni*, *ḥadd* ("one"), *abb* etc.; see below p. 36. Additionally the final consonants of the imperatives in question will very seldom occur in absolute pause, so that a doubling usually would not be necessary.

The problem becomes still more embarrassing, when we take into account that the imperative of the sg. fem. in the I. form is noted *iftahi*, *uhrugi* not *\*iftahi*, *\*uhrugi*. When we add the noting of stress on the penultima in words like *mad'rasa*, *mir'tikin* we as a result get that rather a lot of words and forms seem to be stressed on the penultima instead of the antepenultima. Reviewing these words and forms we detect that all of them belong to the same type: closed antepenultima, short vowel in an open penultima, closed (*iq'tatal*, *mir'tikin*) or open (*iftahi*, *mad'rasa*) ultima.

The stress of words of this type indeed forms a special problem. In Upper Egypt at least most of the words really are stressed on the antepenultima, as should be expected: *'madrasa*, *'mirtikin*. A word like the last mentioned shows that the *hamzat-al-waṣl* does not influence the place of accent, since the word is a participle in the VIII. form. We are lead a step further by the following observations: In Lower Egypt the stress is not at all evident. In any case the first syllable shows a musical accent, a special movement of tone. This may possibly be counted as representing a previous stress. Then the stress on the second syllable must be considered an innovation. As a matter of fact: The dialect shows a tendency towards elision of a short vowel in an open syllable after a stressed, long syllable. At least is an *i* regularly elided in this position: *\*kātiba* > *kaiba*; *\*kātibu* > *'kabu*. But in the type *mirtikin* an elision of that kind would lead to a form *\*mir'kin*, which would be impossible. The stress on the penultima, therefore, may have been introduced into Lower Egypt to guard the threatened vowel. But this accent on the penultima of the type in question is still irrelevant, since it is determined by the syllabic structure of the word, the type forming an exception to the general rules.

We are able to advance further by means of a fact of the utmost importance: To the type which forms our problem belongs a series of

verbal forms with final vowels: *tiktibi*, *yiktibu*, *tulrugi*, *tulrugu* etc. In Stage II these words ended in a long vowel. Generally the accent here, too, is noted on the penultima. But it is a demonstrable fact that this accent in any case is an *innovation*. Firstly the stress in Upper Egypt points in that direction. But secondly it can be positively demonstrated that the accent in such forms once must have been on the antepenultima. Forms like *tahidi* "you (fem.) take", *yahidu* "they take" must have originated from *\*tāhudi*, *\*yāhūdā*. In the latter forms the accent *must* have been on the antepenultima to produce the former accent *must* have been on the antepenultima to produce the former forms! At that time, consequently, *tiktibi* and *yiktibi* must have been accented *\*tiktibi*, *\*yiktibi*, in spite of the fact that the *present* accent in Lower Egypt is on the penultima. It, therefore, is beyond doubt that in Stage II the type now treated was accented on the antepenultima.

The accent rules laid down here for Stage II show that the accent was totally dependent on external factors and could not be relevant.

Before the next stage (Stage III) a very important change must have taken place in the Eg.-Ar. dialect. We know that pronominal suffixes of verbs and nouns formed one word together with the latter as early as in the classical language. But the Eg.-Ar. went further on this way of suffixation. Even prepositions with their suffixes coalesced with the preceding verb under one accent, e. g. *\*qālit lāh* "she said to him" > *\*ā'itlā*. This coalescence took place very early, before Stage III, because long final vowels are presupposed: *ifta'hili ya 'zenab!* "open for me, oh Zenab!" In Stage I and II *ifta'hili* was *\*ifta'hili* < *ifta'hī*. Today *ifta'hī* sounds *iftāhī*. We shall see presently that the introduction of -š in the negation belongs to the same period as the suffixation of pronominal suffixes, i. e. to Stage I or II, consequently to the time before the 14. century.

What happened next was the shortening of all final long vowels. In Stage III, therefore, a new system was created, wherein every word ended in a consonant or in a short vowel. This is the linguistic system until Stage V. E. g. *\*āšā* (II) > *'āšā* (III); *\*ḥulafā* (II) > *'ḥulafā* (III); *\*'arabī* (II) > *'arabī* (III) etc. Only in this Stage or afterwards the fem. -h after short vowels and the pausal -h's can have disappeared; for before that time short final vowels were impossible.

In this Stage the accent was still determined by the quantity of the syllable. The rules followed were identical with the rules of



Stage II with the only difference claimed by the shortening of the final long vowels. In rule 1. of Stage II, p. 23, the exception of a final long vowel, consequently, has to be omitted, since there was no final long vowel any longer. As to the type *maḍrasa*, *tiktibi* etc. the stress must still have been *clearly* on the antepenultima, since the second vowel of *\*tāludi* etc. certainly was not yet elided.

Through a lucky chance we are able to fix one point of *absolute* chronology of the development of the Eg.-Ar. dialect: Stage III cannot have been reached before the 14. century. This conclusion can be drawn from the fact that the *-š* of the Egyptian negation *mā* . . . . .-š, e. g. in *mā fataḥūš* "they did not open", presupposes long final vowels. In the example mentioned the form must have sounded *fataḥū* with long *ū* at the time when the *-š* was introduced. Now we know that the Arabic dialect of Soudan was introduced from Egypt in the 14. century. And at that time the *-š* did not exist, for it is not to be found in the Soudanese dialect. But we do not know how long *after* the 14. century the final long vowels were preserved in Egypt. We only know the *terminus post quem* for their shortening.

The existence in Stage II and III of an accent of a similar kind as the accent of today is only indirectly demonstrable, through the present accent of the literary language (below p. 33). But in the next stage (*Stage IV*) vowel shortenings appear which make the existence of accent undeniable.

That final vowels may be reduced, i. e. shortened or elided, at the same time as the opposition between long and short vowels *within* the word itself existed, is shown by the classical language, in which final vowels often are shortened or reduced. But in Stage IV of the Eg.-Ar. dialect this vowel reduction effects *long* vowels *within* the word itself. And this is impossible when a long vowel still preserved has not got a special stress which gives this vowel a stronger emphasis than the other long vowels which are not stressed. In *šabābik* there are two long vowels. When there were no stressed syllable both vowels had to be pronounced long. But when the stress rules laid down above came into force the last syllable was stressed. At the same time the second syllable was not stressed. Therefore, the *a* was shortened: *šabā'bik*. This shortening must have taken place *after* the reduction of the final vowels, since the latter started as early

as in the classical language. Its relative chronology, therefore, is quite sure. It must represent Stage IV.

The accent rules for this Stage must be the same as the rules of Stage II and III, above on p. 23, 26, with the only exception that rule 1. gets the following form:

The long vowel of a word is always stressed. In this Stage no word has more than one long vowel, since every other long vowel is shortened.

Rules 2. and 3. are valid for Stage IV too. But it must be added that the tendency away from stressed antepenultima successively grew very strong, at least in Lower Egypt. The reason was that the marked accent not only had the effect that long unstressed vowels were shortened. It also caused the reduction of many short vowels in open and unstressed syllables. Thus *i* in open syllables after a stressed long syllable was elided: *\*kātibā > katba*. Forms of the type *\*'tāludi* (above p. 25) became *'tāḥdi*. In this way many words with previous stress on the antepenultima got the stress on the penultima, with the consequence that the number of words with stressed antepenultima decreased largely.

This fact must have strengthened the previous tendency towards stressing words of the type *maḍrasa* on the penultima. The accent rule 3. for Stage II may, therefore, obtain the following form for Stage IV: If the two last syllables of a word could not be stressed according to rule 1. and 2. the antepenultima was stressed. Excepted are words of the type *maḍrasa*, *iqṭaṭal*, etc., which (in Lower Egypt) were stressed on the penultima; the antepenultima then shows a special movement of tone characteristic of this type of words.

The marked stress of Stage IV also effected *i* and *u* in open syllables *before* the stress, so that they often were reduced to the indefinite vowel *ə*, at least in fluent speech: *ki'tāb > kə'tāb*; *mu'kattib > mə'kattib* etc. On the whole the vowel reductions shown by the present dialect must have taken place as a consequence of the accent of Stage IV. It has to be mentioned that reduction of *short* vowels may have taken place at an earlier date, since a reduction of that kind is possible within a system in which vowel quantity and not stress is relevant: The predominance of the long vowel(s) may cause reduction of the short vowel(s). But in the Eg.-Ar. the numerous reductions



of short vowels can scarcely have taken place *before* the shortening of the long final vowels. On the whole it must be considered most probable that reductions of long and short vowels within the word are due to one and the same cause and have taken place approximately simultaneously.

From the fact that every long vowel is stressed in Stage IV it cannot be deduced that every stressed vowel is long. It cannot even be deduced that the stressed *syllable* must be long. It may quite, well be short, as in *'hārag*, *'kūtub*, *'fihim*, etc. Thus the quantity of the vowel or the syllable is no mere function of the stress. But a *tendency* in this direction seems to have started in this Stage as a consequence of the predominant accent. That means that the accent must have tended to prolong a short vowel in an open syllable or to double the following consonant. In some very frequently used words this tendency gained the ground, e. g. in *'hāwa*, *'hīya*, *'hunma*. If this tendency had been allowed to work freely, we would have got a system in which quantity were totally dependent on accent, so that only accent and not quantity would have been relevant. The whole problem will be treated below on p. 39 ff.

In Stage IV still every word ended in one or two consonants or a short vowel. Long final vowels did not exist. Within the word every long unstressed vowel and every long vowel before two consonants was shortened.

But the system of Stage IV also was subject to changes creating *Stage V*. Those changes did not only effect minor details. One special phenomenon was of the most significant importance:

A radical change of the system of final vowels took place: The still existing (non-radical) final *-h*'s were elided! This phenomenon was treated above, where it was shown that after the elision of the nominal fem. ending *-h* and the suffix *-h* after short vowels the suffix *-h* after long vowels still existed. But it was also shown that eventually even the latter *-h*'s were elided. We know recur to this elision, because it belongs to the latest stage of development. In fact, as we saw, it was not accomplished at the time of Spitta-Bey, and there may still be people who pronounce this *-h* of the suffix in some cases. That does not change the issue. In structural analyses we often have to abbreviate and make abstractions. And since even Spitta-Bey admits

that the pronunciation *without -h* is quite as good as the one *with -h*, we have to reckon with the fact that no final (non-radical) *-h* occurs in the latest Stage of the development of the dialect.

The elision of *-h* after long vowels has created a new linguistic system, where long final vowels once more appear after their disappearance in Stage III. But now all of them are stressed. In this system a word like *aš'ya* "things", pl. of *šay*, is possible. Regularly it ought to be *\*'ašyā*. It must therefore be a loanword from the literary language not introduced before the elision of the suffix *-h* after long vowels. If it were introduced before that time it must have been introduced before Stage III, i. e. in the time when long final vowels existed. But that is impossible because the *-a* then must have been *shortened* in Stage III. The genuine dialectal word for "things" is *ha'gāt*. *Aš'ya* is not only a loanword, it is very recent and rare. Personally I have scarcely heard it, except on the records of the Linguaphone Course. To the same stratum the pronunciation *ha'ya* "life" instead of *'hāya* (above p. 20) must belong.

This new system with both short and long final vowels does not imply that the opposition between long and short final vowels is relevant, i. e. that this opposition *per se* effects the meaning of words. For a long final vowel is invariably *stressed*, and a short is *unstressed*. The semantic function of the stress (and quantity) is to notify the 3. p. m. s. g. as an objective or a possessive pronoun, so that, when there are two homophones, one with an unstressed short final vowel and another with a stressed long final vowel, the meaning of the last word includes the meaning of the first word with the addition of a relation to the 3. p. m. s. g., e. g. *'yikibu* "they write", *yikibā* "they write him", *'maska* "she is holding", *mas'ka* "she is holding him"; see below p. 35 f. But complete homophones without shift of the position of accent may also be found, so that the one word includes a relation to "him" or "his", e. g. *'yikibu* may mean both "they write" and "he writes him" (< *\*yikibuh* in Stage I and II).

The loss of *-h* makes the functional value of the stress much greater than it was before, so that it must be considered a possibility that *stress* and not vowel quantity represents the relevant oppositions; see below on p. 35 f. But in spite of this fact it seems that the tendency from Stage IV to make stress gain the complete victory



has come to a standstill. The resistance from the literary language has proved too strong. It is very risky to prophesy anything in the history of a language. But most probably the stressed short vowels in open non-final syllables will never be long. The future of the Egyptian colloquial is obscure. But so much is certain that the influence of the written language is going to increase.

The grammatical function of stress appears in words with a final long vowel. In words with a final consonant the suffix is an unstressed *-u*. From a synchronic point of view the suffix, therefore, really has two forms. But those forms are not *-u* and *-h* as generally maintained. They are *-u* and a stressed final vowel, whatever it may be.

But how is this situation to be explained historically? The Old Arabic forms of the suffix in question are discussed in my "Altarabische Pausalformen" on p. 89 f. The normal form was *-hā* (*-hī*), but after a long syllable it was usually pronounced *-hū* (*-hī*). There were, however, dialects in which it was *-hā* (*-hī*) or *-hū* (*-hī*) in both cases, so that the preceding syllable had no influence. A most interesting fact is that the classical *pausal* form was always *-h*, the case-ending preceding this consonant. And, as pointed out before, we have principally to take the *pausal* forms as basic for the dialectal forms (Stage I). The classical difference in *context* between *-hū* and *-hī*, therefore, has no interest in this connection. To understand *ki'tābu* we only have to go back to the *pausal* nominative *kitābuh* (Stage I and II), which form in Stage III became *ki'tābu*. To understand *fata'hū* "they opened him" we start with *fata'hū*. This form was maintained until Stage V, where it became *fata'hū* with irrelevant length of *-ū*, etc. etc. With the vowel *ā* we get *fatah'nāh* "we opened him" > *fatah'nā* (Stage V). With the vowel *i*: *fatah'tih* "you (fem) opened him" > *fatah'ti* (Stage V). That the purely phonetic *pausal -h* must have been dropped much earlier is shown by the fact that a long vowel before the *-h* of the suffix has kept its length and is stressed, whereas the final originally long *a* of 'šālā, 'zākā, and 'hāyā is shortened and unstressed; see above p. 20.

So we see that in Stage V in the suffix *-hā* both *h* and *u* have disappeared. The *u* in *ki'tābu* is not the *u* of *-hu*, but the auxiliary vowel, which before *u* was the original case-ending of the nominative; see above p. 19.

The difference which modern scholars make when writing *ki'tābu* without *h* and *a'būh* with *h* is unfounded. The only reason may be that an aspiration after a final long vowel is more easily heard than after a final short vowel. But this aspiration has, as we know, nothing to do with the *h* of the suffix; see above p. 18 f.

The chief point is that the old *pausal* forms must be regarded as fundamental. In our case this does not mean that *-hū* cannot appear in dialects. But then old *pausal* forms ending in *-hū* with a long *-u* must be supposed. So the Soudanese form *abūhu* < *abūhū* "his father" may be explained. And, incidentally, such forms are met with in Egypt too. But the main stream in the development of Eg.-Ar. presupposes the classical *pausal* forms with *-h*.

### III. Relevance of accent or vowel quantity.

In the preceding chapter we saw that, at least from Stage IV on, a marked accent had developed in the Eg.-Ar. dialect, and that this accent tended towards dissolution of the old system of vowel quantity oppositions. But the question of the relevance of accent<sup>1</sup> or vowel quantity in the present linguistic system is very complicated and requires a special investigation.

It may be convenient to start with a purely practical observation. When a student of classical Arabic arrives in Egypt for the first time I think the first thing he observes while talking with natives is the unexpectedly great rôle of accent in the colloquial. From his studies he knows the importance of quantity of vowels. In the classical language accent had no function at all. For it was determined by the quantity of the syllables. But then he discovers that in the colloquial vowel quantity is of little importance. As said above, this is a practical point of view. We cannot use it for scientific purposes. But people talk to be understood or misunderstood. And the fact that accent seems to mean more than quantity must be explained scientifically.

<sup>1</sup> In this paper *stress* and *accent* are used without any difference of meaning. Both of them signify a special emphasis of a syllable through *pressure* or *pitch* as opposed to *duration*.



All of us know that the classical language must be the basis of all modern dialects. Perhaps not precisely the language of the grammarians and the Koran. May be the basis is a later form of the 'Arabiya, as already pointed out above; see p. 7, 13, 17. But, in any case, in this basic language quantity of vowels must have been of the greatest importance to a man who wished to be understood. The question, therefore, arises: Does quantity of vowels mean anything in the spoken Arabic of Egypt? One thing is true, nobody can be well understood in Egypt today without the accent used by the natives. As a matter of fact all long, unaccented vowels are shortened. Personally I had a very significant experience in Cairo. I read the Koran with a well-known reader. One of the things he rebuked me was that I did not pronounce the unstressed long vowels long. But the natives themselves have the same difficulty. From their own dialect they do not know unstressed long vowels. Reading the literary language of newspapers etc. they also often shorten unaccented long vowels, because the accent they are accustomed to is very marked. Also in reading the Koran they use a marked accent. But in that case it is reckoned as bad pronunciation if they shorten unaccented long vowels.

Modern readers follow certain rules of accent when reading the classical language.<sup>1</sup> If we, however, examine the rules followed by them, especially by the recitators of the Koran, we shall detect that their accent shows a surprising harmony with the accent and accent rules of the Eg.-Ar. dialect (and possibly other Arabic dialects). As a matter of fact, two evidences show that we cannot assume any accent at all in the classical language.

The one evidence is the fact that the Arabic grammarians of the classical time do not mention with a single word any linguistic phenomenon that might be interpreted as accent. Their exactitude and detail description of linguistic phenomena is so outstanding and well-known, that an omission of a phenomenon like *stress* would be quite incomprehensible if it really existed.

The other evidence was mentioned above on p. 22. It is impossible to assume any accent before Stage II in the dialect, i. e. before the elision of final *hamza* and fem. *-h* after long vowels. If there

<sup>1</sup> A brief summary of these rules is given in Carl Brockelmann, *Arabische Grammatik*, 12. Aufl., 1948, § 15.

had been any accent before that time, words like the classical *ḥulafā'*, *ṣalāh* etc. must have had the accentuation *\*ḥula'fā'*, *\*ṣa'lā* in the present dialect, just in the same way as the classical *ḥilāb* is accented *ḥi'lāb*. Now the present accentuation is *'ḥulafā'*, *'ṣālā* etc. That shows uncontestedly that the accent rules which have produced *ḥi'lāb* must have come into existence *after ḥulafā'* and *ṣālāh* had become *\*ḥulafā'* and *\*ṣālā*. For then they ended in a long vowel and followed other words with such endings, e. g. *katabā* etc., and consequently were accented *\*'ḥulafā'*, *\*'ṣālā* like *'katabā*. The rule that a final syllable which (in pause) was closed and had a long vowel, like *ḥi'lāb* in the present dialect, is accented, knows *no other exceptions* than the words which ended in *hamza*. The conclusion that no accent can have existed before Stage II is, therefore, absolutely unavoidable.

The classical language consequently cannot have had any accent at all, not even a phonetic, let alone a phonematically relevant, accent. The only prosodic oppositions between syllables within the word must have been those between long and short syllables. In other words: The classical system must have been purely quantitative. This conclusion is in accordance with the fact that the classical metrical system only counts long and short syllables and knows nothing of any emphasis of special syllables through accent or stress.

Thus accent must have come into existence in the dialect in Stage II or later. We are, indeed, able to fix the Stage more precisely. The dialectal rules laid down above on p. 25-27 for Stage III and IV are exactly the rules of accent followed by the recitators of the Koran and other modern readers. There is only one discrepancy: In Stage III and IV the fundamental rule that the last long vowel shall be accented does not except a final long vowel, which did not exist after Stage II. Now the accent rules of the classical language really do except this vowel. The conclusion, therefore, must be drawn that we must keep to Stage II to find the exact rules of accent followed by modern readers of the 'Arabiya. If we should follow the systems of Stage III and IV we would not have had any final long vowels at all. The really existing final long vowels of the 'Arabiya should therefore be expected to follow the fundamental rule and consequently be stressed. This has been the fate of the final long vowels coming into existence in Stage V, e. g. *yikīlū'ā* "they write him", *aš'yā* "things", *ḥa'yā* "life" etc.;



see above p. 20. The accent rules of the 'Arabiya, which exclude a final long vowel from the fundamental rule, show that an accent of the same kind as the accent of the modern dialect was introduced in Stage II. For the accent rules to be assumed for this Stage with a view to understanding the present accent are exactly the same rules as those followed in reading the 'Arabiya. These rules are laid down above on p. 23.

Now we shall examine briefly the application of the dialectal rules of accent to the reading of the classical language.

It is to be noted that a correct pronunciation of the literary language requires that long unaccented vowels be not shortened, just in the same way as in Stage II. A secondary stress most probably guarded and still guards an unaccented long vowel. From Stage IV on this vowel was shortened. A secondary stress is also heard when two or three short syllables precede the accented syllable, e. g. *'raqaba'tāni* "two necks". This stress is only a mechanical consequence of the main stress, but it probably has a dialectal foundation in Stage II. More important is: Owing to the changes of words and forms in the dialect in Stage I and II the dialectal rules when applied to corresponding classical words in many cases necessarily lead to the accentuation of other syllables than those accented in the dialect. The chief problem must, of course, be that of the accentuation of the syllables preceding the antepenultima, since such an accentuation was not found in the dialect and nevertheless is claimed by the dialectal rule 2. (above p. 23) of accent when applied to the 'Arabiya. As to this question two divergent solutions appear. The one strictly follows rule 3, which claims that no syllable before the antepenultima can be accented. This solution not only produces an accentuation *ma'drasatun* (context), which has a support in the dialectal *ma'd'rasa*; see above p. 24—27. It also produces forms like *qa'talahū*, which has no support in the dialect, since the word here sounds *'qatalu* and certainly had this form (with long *-ā*, it is true) as early as in Stage II. The other solution follows the chief rules of accent in the dialect, viz. that the last long syllable shall be accented with the exception of the last syllable, and that the first syllable shall be accented if there are no such long syllables; see rules 1. and 2. above p. 23. This solution creates forms like the contextual *'ma'drasatun*,

which is supported by the dialectal *'ma'drasa*. It also produces forms like *'qatalahū*, which is supported by the dialectal *'qatalu*. On the whole the latter solution is more in accordance with the *actual* accent of the dialect, since final syllables elided in the dialect are not counted.

Other divergences between the recitators of the Koran also occur. Thus some of them allow the accentuation of an auxiliary syllable, e. g. in *'uqtul*, others except such a syllable: *uq'tul*. Here, too, dialectal discrepancies may be underlying.

In other cases the dialectal rules of accent enforced the accentuation of other syllables than those which are and were (in Stage II) accented in the dialect. Thus in *'hulafā* the first syllable was accented in the dialect. But in the literary language the word kept its final *hamza* with a preceding long vowel, so that it had to be accented: *hulā'fā*. In an analogous way the dialectal *'ḥayā* was represented by the classical *ḥayāh*, which must be accented *ḥā'yāh*, because it had kept its *-h*. The classical *'arabiyy-*, represented by the dialectal *'arabī*, had to be accented *'ara'biyy-*, because its *-i* was no final vowel. In all such cases the *rules* of accentuation have their origin in the dialectal pronunciation.

The contextual case-endings *-in*, *-an*, *-un*, which were lost in the dialect were, of course, not accented, since, according to rule 2. (above p. 23) a closed final syllable with a short vowel was accented only when it ended in two consonants.

The rules governing the accent of the literary language thus have a rather remarkable origin. They are derived from a linguistic system different from and younger than that to which they are applied. The only thing we can say about the age of Stage II is that it still existed in the 14. century; see above p. 26.

Only from Stage II on, accent is a reality in the dialect and in the pronunciation of the 'Arabiya. But neither in this Stage nor in Stage III and IV the accent was of any functional relevance. For it was totally dependent on the quantity of the syllables. Only in Stage V, which represents the modern system, there are possibilities of the relevance of accent. There are, indeed, several facts indicating such a relevance. Thus we find words like *'yiktibu* with the first syllable stressed and *yiktū'la* with the last syllable stressed. The first word means "they write", the second means "they write him (it)".



Similarly we have *'maska* "she is holding" as opposed to *mas'kā* "she is holding him" etc.; see above p. 18 f. Such minimal pairs of words seem to necessitate the conclusion that change of stress means change of meaning. But, as mentioned above p. 29, things are not so simple. For in the words in question the stressed final vowel is *long*, whereas the unstressed final vowel is *short*. Accent, therefore, may still be considered a function of quantity.

Briefly the question is whether quantity is dependent on accent or accent on quantity. The only method of solving this problem consists in an examination of the cases where oppositions of short and long vowels are *possible* and of the cases where they are *impossible*. Where such oppositions are impossible vowel quantity is, of course, irrelevant. Thus in unstressed syllables only *short* vowels occur. In this position, therefore, vowel quantity is irrelevant. But stressed *final* syllables both long and short vowels are possible. But stressed *final* vowels are out of question, too, because they are always long. As we know, they were introduced in Stage V as the consequence of the elision of the suffix *-h* after long vowels. Similarly a stressed vowel before two consonants is always *short*, e. g. in *'kalba* < *kātibā*. Further: An opposition between long and short vowel in a final syllable is impossible. For a stressed form like *ab* with short *a* does not occur in Eg.-Ar. It sounds *'abb*, when it is stressed. And the word *'um* "rise", sounds, *'ām*; see Gairdner, *Phonetics*, p. 71, n. 1. Consequently, when a word like *ka'man* "also", is stressed, it must be pronounced *ta'mām* or *ka'mān* or *ka'mann*; *ta'mam* "right" must be pronounced *ta'mām* or *ta'mamm* etc. An opposition *ta'mām*: *ta'mām* etc. is impossible.

The result, therefore, is that only *one* position is left where an opposition between long and short vowel is possible. This position is an accented, open, non-final syllable, e. g. the first syllable of word like *'kātab*. In such a position we actually hear both long and short vowel. In most cases the vowel is long, e. g. in *'kātib*, *a'būya*, *'rāgil* etc. But there are numerous cases where it is *short*, e. g. in *'kātab*, *'lārag*, *'gāras*, *'āna*, *'kūtab*, *'fihim*. When we disregard these cases, it would be sufficient to note only accent and *not* vowel quantity. Then every stressed vowel before two consonants would be *short*, before one consonant long, so that vowel quantity would be dependent on stress. But the syllables mentioned seem to make such a solution impossible. For in any case we would be obliged to note vowel quantity in such syllables.

The question, consequently, arises if we had not better note only vowel quantity and *not* stress. The usual method is the noting of *both* vowel quantity and stress. Thus the text-books of the American University at Cairo always note the quantity, but often they note the stress, too, when the latter cannot be deduced from the former. Gairdner in his "Egyptian Colloquial Arabic" p. 1, forms the following rules:

- (1) "a long vowel is invariably the accented vowel;
- (2) if there is no long vowel, the accent is on the last syllable but one, unless otherwise marked."

The first rule is unassailable. The second implies that sometimes the notion of quantity is not sufficient for determining the accent. That should mean that the accent was relevant and not the quantity, since the former cannot be deduced from the latter. But this fact would contradict the first rule; for this rule cannot be reverted, so that it would sound: "the accented vowel is always long". We know that in words like *'lārag*, *'kāba* etc. the accented vowel is short.

We thus seem to be obliged to reckon with relevance both of accent and quantity, because it does not seem possible to deduce them from each other. But Gairdner's second rule can be corrected. In fact, it can be formed so that the accent can be determined by the quantity in practically every case, viz. as follows:

If a word has only *short* vowels, the stress follows the quantity of the syllable in such a way that the last closed syllable gets the stress, with the exception that the final syllable is stressed only when it ends in *two* consonants. When there is no such final and no other closed syllable, the first syllable must be stressed. Examples: *ka'tābtu* "you (pl.) wrote", *ka'tābt* "you (sg.) I wrote" *'kātabu* "they wrote". This rule has the advantage compared with Gairdner's rule (2) that we need not mark the stress on the last syllable, when it ends in two consonants, which often occurs. Curiously enough Gairdner himself, in his "Phonetics" on p. 71, gives the same rule for the accent on the last syllable as is given here.

If the rules laid down here covered all cases, it would be completely unnecessary to note the accent at all. It would be possible to deduce it from the quantity of the syllables, and only quantity would be relevant and had to be marked.



But even Gairdner, who always marks quantity, admits that accent rules for all cases "would be too complicated and therefore ineffective" (Phonetics, p. 71). In fact, if we look at the question from the viewpoint of relevance and possible oppositions we have to ask whether this statement of Gairdner's means that accent somehow depends on quantity in all cases or not. In other words: Is accent or quantity or both of them relevant?

First we have to clear up the problem of words accented on the antepenultima. This problem was treated above on p. 24-27. There it was shown that the accent of words the three last syllables of which now are short, does not represent any problem: The accentuations 'katabu, iq'tatālu etc. are obvious. But then we treated the types represented by *madrasa*, *iq'tatal*, *yiktibu* etc., to which types also words like *katabtini* belong.

The investigations above on pp. 25-27 lead to the result that the noting of the stress on the *penultima* of words belonging to this type only holds good for Lower Egypt. Further the accent on the penultima must be an *innovation*. This was shown by verbal forms where the vowel of the penultima was elided as a consequence of accented antepenultima: \**tāyudī* > *'tahdī*. Most probably the dominant accent of Stage IV lead to this elision. It was also shown above that accent could not be considered relevant on the basis of this type, since it is dependent on external factors. If we only know the accent rules to be applied to the special type of words the accent need not to be noted.

As a matter of fact, there does not seem to be found any words in which accent cannot be deduced from vowel quantity or from the syllabic formation of the word. But obviously this fact is not in accordance with the apparently important functional rôle of the accent. Minimal pairs like those mentioned above p. 35 f. certainly make the impression that the accent, not the quantity, is the decisive fact in changing the meaning of the words. The length of the final vowel only seems to be a mechanical consequence of the accent. But it there are no cases in which we are obliged to mark the accent, we still have to keep to the theory that it is irrelevant, especially since we *must* mark quantity in words like *'kātāb*; see above p. 36.

In fact, it is difficult, if not impossible to find words in which the accent *must* be marked. The accent of the verbal paradigms *ik'tātab* and *in'kātāb*, which correspond to the classical VII. and VIII. forms, both of which have initial *hamzat al-waṣl*, follows the stress of the types mentioned just above (p. 23 ff.) and, consequently, represents no necessity of being marked. The same holds good for forms like *katabtini* (noted also by Gairdner, Phonetics, p. 71).

It must, however, be kept in mind that a long vowel within a word is shortened when the syllable loses its accent, e. g. *'kātib* "he corresponded", but *ka'tibt* "you corresponded". Such a phenomenon does not seem to indicate any important function of the quantity, since it varies within one and the same word according to the accent. On the contrary, the accent no doubt appears as the predominant factor.

We are in a great dilemma: Some facts seem to indicate that the accent depends on the vowel quantity, is irrelevant, and need not to be marked. Other facts seem to indicate that quantity is dependent on accent, e. g. in final syllables in which only *ta'mām* or *ta'mamm* is possible, and in which a stressed final vowel *must* be long. If we prefer to mark the accent in every case and not mark the quantity at all, there is only one position left, where marking of quantity is necessary, viz. in stressed, open non-final syllables, e. g. in *'hārag*, *'kātāb*. In this position we know that both long and short vowel is possible. But because it is mostly long, we only need to note the quantity when it is short.

That the shortness of the vowel of the first syllable of words like *'kātāb* is a clear phonetic fact cannot be doubted. But has the shortness here any semantic function? In other words: Do minimal pairs of words exist, in which the meaning is different and the only phonetic difference is that the vowel of the one word is long and that of the other is short? Has the Eg.-Ar. dialect similar oppositions as in the classical *kātāba* : *kātāba*? The answer is curious: The classical grammatical opposition mentioned is no longer bound to the quantity of the first vowel, since the second vowel of the first word has become *i*, so that we get the opposition *'kātib* : *'kātāb*. That the opposition really is *i* : *a* is shown by the forms where the first vowel loses its length together with the stress, so that we get: *ka'tibt* : *ka'tābt* etc.



As a matter of fact, I never met with minimal pairs in which the differentiating factor was the vowel quantity only. I have asked my Egyptian friends too, but nor could they find such minimal pairs, in spite of the fact that length and shortness are evident from a phonetic point of view.

Now we are approaching a probable solution of our embarrassing problem. The short stressed vowel in the type *'kātab* represents the system of accent from Stage II on, in which quantity was independent of accent. In this system a short accented syllable would be very usual. In the present *dialect*, however, the quantity clearly tends to be dependent on accent. In a stressed final syllable this tendency has become an exceptionless rule, so that we firstly get secondary lengthening of an originally closed syllable, e. g. *ta'mām* or *ta'mann*, *abb* etc.; see above p. 36. Secondly a stressed final vowel is always long: *yikṭi'bi* "they write him", *aš'ya* "things" etc.; see above p. 29.

The *tendency* is not confined to final syllables. This is a very important phenomenon, which was mentioned above on p. 28 under our treatment of Stage IV. In the present dialect we hear both *i'zayyak* "how are you?" and *i'zāyyak*, in the same way as *ta'mām* or *ta'mann*, *ka'mān* or *ka'mann*. These words are very frequently used and, therefore, show the dialectal tendency very clearly. We have other instances too. The personal pronouns signifying "he" and "she" were mentioned above p. 28. In the dialect they sound *'hūwa* and *'hiya* with long *ū* and *ī*. In the Old Arabic language they sounded *huwa* and *hiya*. Only the accent can have produced the lengthening. The same is the case with *'humma* "they" corresponding to the classical *humu*. Here the lengthening is obtained through doubling of *m*.

The very frequently used word for "man" is in the dialect *'rāgil* with a long *a*. The classical equivalent is *rāḡul*. Etymologically the dialectal lengthening has no reason. The accent only can be responsible.

Another very interesting function of the accent appears in the active feminine participle with suffixes. We know that *'maska* means "she is holding" and that *mas'ka* means "she is holding him". But the function of accent goes farther: *'maskak* < *mās'kak* means "he is holding you (masc.)". "*She* is holding you (masc.)", however, is in the Eg.-Ar. *mas'kāk*. If the length of the last *ā* here were etymologically justified, we might assume that the shift of accent were

conditioned by this length. But as far as I can see, there are no historical reasons justifying the length of the fem. -*a*. The classical form in pause in accusative (the forms usually surviving before -*ka*; see above p. 12) would be *māsikatak*. But the construct form with -*t* is in the Eg.-Ar. never used in the suffixed forms of the participles. These forms are built up directly from the unsuffixed absolute form. The length of the -*a*, therefore, must be explained as a result of the accent, which must be regarded as the semantically differentiating means. In *mas'kāk* the length of the *a* is necessary, because a final, closed and stressed syllable must have long vowel or double final consonant; see above p. 36. In *mas'kākī* < *māsikākī* "she is holding you (fem.)" the length of the second *a* must be due to the system of the Stage (most probably Stage IV) which produced words like *hūwa* etc., instead of *huwa* etc.; see above p. 40. The same is the case in the other suffixed forms with long *a* before the suffixes in a stressed open syllable.

A curious instance of secondary prolonging of a stressed vowel in an open syllable is represented by the imperf. of the verb *gī(h)* "he came", viz. *yīgi*, *'hīgi*, etc. These forms go back upon *\*yigi*, classical *yaḡi*. Regularly *yaḡi* should be *\*yigi* < *\*yigi*; cp. above p. 25 f. The lengthening of the first *i* cannot be explained when we do not assume the accent as the real cause. For forms like *'yi'af* (perf. *'wi'if*) with short *i* after the vowel of the preformative show that the lengthening cannot be due to morphologic causes.

In any case we now have so many instances of secondary lengthening of a stressed syllable that the dialectal tendency should be evident. Then the embarrassing problem of the interdependence of accent and quantity can only be solved in one of the two following ways: 1. A dialectal system may once have existed in which every stressed syllable was long. In this system an opposition *'kātab*: *kātab* must have been impossible. But this system must partly have been broken up phonetically through the increasing influence of the literary language, which is also the language of the Holy Koran. Only a few remains of this previous stage are still found in frequently used words. This solution is not very probable, since it is not easily understood how the influence of the literary language should effect the dialectal system so profoundly. 2. The dialectal *tendency* was counteracted



by the literary language, so that this tendency now only reveals itself in some frequently used words and forms. This solution must be regarded as very plausible. The dialectal tendency has not been allowed to work itself out freely; see above p. 28.

In any case it cannot be doubted that *two systems* are struggling against one another in the present dialect, one system claiming dependence of quantity on accent and relevance of accent only, another quantity system claiming dependence of accent on quantity and relevance of quantity only. The dialectal tendency has conquered the territory to so great an extent that quantity is independent on accent only in stressed, open, non-final syllables.

Even in the syllables last mentioned the phonetic opposition of long and short vowels does not, as already mentioned (p. 40), seem to be utilized semantically. On the contrary, even in a case where such an utilization should be expected it is curiously enough not found. Thus we should expect the opposition *\*katab'ini* 'you (masc.) wrote me' against *\*katab'ini* 'you (fem.) wrote me', because else the masc. has short and the fem. long vowel before suffixes. But, strange to see, this opposition is not realized. The *i* is short in both cases! The phenomenon is very surprising, since in this case the quantity would be the only factor differentiating two forms from each other. The long *-i* of the 2. p. f. sg. in the perf. tense only appears before endings in forms also showing shift of accent: *'mā fa'tahūš* 'you (masc.) did not open' as opposed to *'mā fatah'ūš* 'you fem.) did not open.'

The insignificant rôle of vowel quantity is on the whole, as we know, revealed in the fact that long vowels are shortened as soon as they lose the accent. Take, e. g., the frequent word *'āl* 'he said'. In fluent speech it almost always sounds *'al*. Even if long vowels do not lose the accent, but appear before two consonants, they are shortened. That goes so far that in fluent speech it may effect the vowel of a final, closed syllable, as in *ki'tab ki'bīr* 'a big book', which becomes *ki'tab ki'bīr*; see Gairdner, *Phonetics* p. 68.

<sup>1</sup> The accent of this type was treated above on p. 23 ff., 39. In any case both an original *katab'ini* and an original *\*katab'ini* now have the same accent.

We now possibly are able to solve the problem of the short *i* in the perf. *gi(h)* 'he came'. Etymologically (diachronically) this quantity is unintelligible; see above p. 21. But so it is synchronically too. When it is stressed it ought to sound *\*gi(h)* or *\*gihh*, and when it is not stressed, there is no problem at all. If the word when accented sounds *gi(h)*, and that pronunciation does really occur, the explanation can only be as follows: The vowel quantity is of little or no functional value. Under the influence of the literary language speakers of the dialect have become accustomed to short vowels in stressed syllables before one consonant. Therefore occasionally a vowel may be shortened in this position, even in cases where no historical reason exists, just in the same way as occasionally it appears long in cases with literary short vowel. In *katab'ini* < *\*katab'ini* such a shortening must be a fact. Undoubtedly a short vowel in the position mentioned has a kind of literary *prestige*.

That Egyptians have a very feeble sense of vowel quantity may perhaps be illustrated by the fact that in writing they often use the vowel letters *aww*, *yā* and *'alif* only to express *quality* of vowels, even in cases where the vowel is so reduced that it scarcely is perceptible. In a word like *fanūs* 'lantern' the *a* is almost imperceptible. But still it is written with *'alif*. And in this case the writing with *'alif* is quite unnecessary to express the quality of the vowel; for the word certainly would have been read with *a*, even if no vowel letter had been written.

Now we summarize: In the Eg.-Ar. dialect of to-day the opposition between long and short vowels does not seem to have any grammatical or semantic function. Even in stressed non-final, open syllables, the only position in which both long and short vowels may occur, the opposition between them does not appear to have any actual function, originally short vowels being occasionally lengthened and originally long vowels being occasionally shortened in this position. The accent, however, has a most important functional value. Diachronically this value has its basis in the marked accent which produced the numerous reductions and elisions of vowels in Stage IV. But the accent did not become relevant before Stage V. Then the elision of the suffix *-h* after long vowels created forms with an unstressed final vowel, so that the stress now signifies the meaning of the lost



suffix. Examples: the pausal form *yaktubūh* became *yikṭi'ūh* "they write him" as opposed to *'yikṭibū* < *yaktubū* (the classical subjunctive and jussive) "they write". The pausal form *warā'* "behind" became *\*wā'ā* > *'wā'ā* as opposed to *warāh* "behind him", which word became *wa'rā*. This fact does not mean that every stressed final vowel includes a relation to the 3. p. m. sg. We know that late loanwords from the literary language like *aš'yā* "things" and *ḥa'yā* "life" have no such relation; see above p. 29. But when there are two homophones, one word with a stressed final vowel and another word with an unstressed final vowel, the former always includes a relation to the 3. p. m. sg.

It is, as we know, beyond doubt that in stressed, open non-final syllables we have to distinguish *phonetically* between long and short vowel, at least in the speech of the educated classes, especially in Cairo. In transcriptions, therefore, it must be considered correct to note the quantity of the vowel in this position when the vowel is short, e. g. in *'ḡaras* "bell" *'bālad* "country", *'nāgafa* "lamp", *'ḥina* "here" etc. If we mark the stress in every case we need not mark the quantity in other cases than the one now mentioned. We get the following rules:

In a stressed syllable the vowel is always long before one or no consonant, unless (in a non-final syllable) otherwise marked. Before two consonants the vowel is always short. In unstressed syllables also the vowel is always short.

I should think that the marking of accent in this way is the most practical and simple method of transcription. For we know that the relevance of quantity is dubious, even in the syllables where a phonetic opposition is found. And it must be admitted that the rules determining the accent on the basis of quantity are rather complicated. The method proposed here is illustrated by the transcription given below on p. 50.

#### IV. The phonematic vowel system.

Phonetically the vowels of the Egyptian Arabic dialect have been well described by Gairdner in his "Phonetics" pp. 37 ff. The viewpoint of the present chapter is of another kind. It is the question of the *phonematic values* of the vowels which is the object. Firstly some remarks upon the terminology: "Phonematic" is used as an adjective derived from the substantive "phoneme". For practical purposes the *phoneme* may be defined as follows: The phoneme is an abstract designation of several sounds which are so similar that a word does not change its meaning when one of those sounds are substituted for another one. An excellent illustration of the fact in question is given by the Arabic vowels which are characterized by Gairdner, Phonetics p. 44, as belonging to the family of *faḥa*. As members of this family he counts 3 short *a*-sounds, one long *a*-sound, and the reduced vowel *ā*. And then he writes: "The differences between them are purely phonetical and not grammatical nor radical, and for this reason they are ignored by the Arabs, and in writing no separate signs for them are provided. Their use in speech is determined by the proximity or non-proximity of certain consonants, viz. the velarizers *ṭ*, *ḍ*, *ṣ*, *ṣ̣*, *ḏ*, the three velars *ḥ*, *ḡ*, *q*<sup>1</sup> and the rolled *r*." With the terminology used in this book we would express the fact so that we have only *one phoneme*, but several *sounds*. The realizations of this phoneme are conditioned by the surroundings; that means that they are combinatory variants of one and the same phoneme. As a matter of fact, the phonetic realization of the phonemes is of no interest from a structural point of view, this realization being merely material and teaching us nothing about the abstract linguistic function of the sounds in question.

First of all we have to solve the question of the *number* of phonemes as contrary to the number of *sounds*. This task, as far as I know, has never been done, and we shall find it rather difficult.

Gairdner is right that the different *a*-sounds do not represent a corresponding number of phonemes. But firstly we have to solve

<sup>1</sup> Gairdner's transcription is transferred to the system used in this paper.



the problem of the reduced *a*-sound. Is it always a realization of *a*? It is true, the *historical* fact that *a* may represent any *originally* short vowel is of no interest in this connection, because we want to describe the present language as a special, synchronic system. But even synchronically it may stand for both *a*, *i* and *u* in open syllables before the stress. It is rather difficult to form any rules. And the question is bound up with the question of the influence of the literary language. But in any case, in fluent speech, e. g. *ṣayyar* is heard instead of *ṣulṣayyar*, *kāṭāb* instead of *kīṭāb*, *nāḍif* instead of *nīḍif* etc. In such cases, i. e. in an open and unstressed initial syllable, the reduced vowel does not represent any phoneme at all. The vowel is phonematically simply non-existing. If the preceding word ends in a vowel it is not even heard, e. g. *ḍak'ṭāb* (< *da kiṭāb*) "this is a book". When the preceding word ends in a consonant the reduced vowel is a mechanical consequence of the fact that three consonants cannot follow each other.

The *a* at the end of words is of another kind. Here it really represents the phoneme *a* in words like *wāḥida* < *wāḥida* "one (fem.)". In such cases it is oppositional to *u* and *i*, *wāḥidu* meaning "his one", *wāḥidī* "my one".

Then we conclude that in the two positions mentioned a special phoneme *a* does not exist. It either represents zero or is a realization of *a*. This conclusion holds good for every instance of *a*.

As to the three different short *a*-sounds noted by Gairdner they undoubtedly represent one and the same phoneme, which is realized in three different phonetic ways according to the proximity of the consonants mentioned.

Now it is a question whether the *long a*-sound can be regarded as a realization of the same phoneme. Phonetically, it is true, the long *ā* belongs to the same family as the short *ā*. Phonematically, however, things are different, when we keep in mind the definition of the phoneme given above. In other words: Can a word change its meaning when a short *ā* is prolonged or a long *ā* is shortened? The problem is treated above in the chapter on relevance of accent or vowel quantity. If relevance of vowel quantity is a phonematic fact, and this is *possible* in non-final open and stressed syllables, then the long *ā* is another phoneme than the short *a*. We saw that the problem is hard to solve. Phonetically the situation is clear. Most

words or forms *must* have a long vowel in this position. That seems to be the dialectal tendency from Stage IV on. But other words always show short vowel in the same position. This seems to be due to the reactive influence of the literary language. Minimal pairs of words like the classical *kāṭaba*: *kāṭaba* are difficult to detect. Such pairs certainly were found before Stage IV, but after that time they at least must be said to be very infrequent, if they are found at all. Things being so we had better give up a strict phonematic classification of the *a*-sounds and be content with the statement that there is one *a*-phoneme that is short and one that is long.

The same problem, of course, arises *vis à vis* all vowels. And we principally have to solve it in the same way. So we have to reckon with both short and long *i*; see Gairdner, *Phonetics*, p. 38 ff. The same seems to be the case with *u*; see Gairdner, p. 42 f.

But difficult problems still remain when the phonetic facts are regarded from a phonematic view-point. There are two sounds which have not as yet been mentioned, viz. *e* and *o*, Gairdner p. 40 and 42. Phonetically they occur both as long and short vowels. Phonematically, however, things are different here too. The two vowels have their origin in classical *ay* and *aw* and ought to be long in every case. In the colloquial they are *shortened* before two consonants and in every unstressed syllable. Consequently, this shortening is conditioned by the position and is of no relevance. We, therefore, still have only one *e*-phoneme and one *o*-phoneme. In the position where vowel quantity might be relevant, viz. in non-final open and stressed syllables, these two vowels are always *long*. Consequently any oppositions *ē*:*e* and *ō*:*o* does not exist.

But then we have to solve the problem whether a short *e* is a different phoneme from a short *i*, and a short *o* a different phoneme from a short *u*. The numerous inconsequences in transcriptions, in which *i* often alternates with *e* and *u* with *o*, even in the same syllable in the same word, seem to indicate that there are no phonematic oppositions *i*:*e* and *u*:*o*.

The definite article *il*, *el* illustrates rather well the lack of any opposition between *i* and *e*. As a matter of fact, it is quite impossible to state such an opposition in any word at all: No word changes its meaning when an *i* is replaced by an *ē* and *vice versa*. Phonetically



it is often hard to say whether to note *i* or *e*, especially in unstressed closed syllables, e. g. *kātīb* or *kaleb*. A velarized consonant prefers a sound that is more *e* than *i*. In any case, a phonematic opposition is out of question.

Just the same statement is to be made as to the relation between *ū* and *ō*. There is, e. g., no possibility of any opposition between *omum* and *umum* "mother". It is completely indifferent whether *ū* or *ō* is used in transcriptions. The phonetic value may depend on the surroundings, so that a velarized consonant requires the more open *o*, but any opposition *o*: *u* is impossible.

As yet we have only treated the short vowels *e* and *o* which may be regarded as mere phonetic variants of originally short *i* and *u*. But then we have *e* and *o* as the short representatives of *ē* and *ō*, originating from *ay* resp. *aw*. They appear as short vowels before two consonants, e. g. *'benna* "between us" from *'bēn* "between", *'betha* "her house" from *bēt* "house", *futt* "I passed" from *fū* "he passed". Here, too, any oppositions *e*: *i* or *o*: *u* are impossible. We might just as well note *biṭha* as *betha*, *biṇna* as *benna*, *fott* as *futt* etc.

But another question arises when we pass from the short vowels to the long ones. The problem is rather embarrassing. It is a notorious phonetic fact that long *ū* and *ī* are more closed than the corresponding short vowels. But the phonetic distance between *ē* and *ī* is not so long as in English. Gairdner, *Phonetics* p. 40, remarks that *ē* is "nearer *ī* than the English person is naturally inclined to make it." And the phonetic difference between *ū* and *ō* is also difficult to perceive. In a modern loanword like *sa'lūn*, for instance, also the transcription *sa'lōn* occurs. But although the phonetic differences are minimal we may still have different phonemes. As a matter of fact, the opposition *ē*: *ī* seems to have the evidently important function of distinguishing the masc. plur. ending *-ūn* from the dual ending *-ēn*, although it may be difficult to find any word with both *-ūn* and *-ēn*, because substantives mostly have the broken plural. But then we have oppositions like *bēḏ* "an egg": *bīḏ*, pl. of *'abyaḏ* "white". Such oppositions, it is true, are not frequent. But they seem to exist, if the words in question be not homophones.

Minimal pairs of words with the opposition *ū*: *ō* seem to be rare, if they exist at all. We might think of words with an originally

long *ū* as opposed to words with *ō* < *aw*. Minimal pairs seem hard to detect. The possibility, however, exists, e. g. *'ūm* "rise" as opposed to a non-existing *\*'ōm* < classical *qawm* "people". But even in such cases we might have homophones.

The conclusion must be drawn that the oppositions *ī*: *ē* and *ū*: *ō* do exist. They are, however, very little utilized. They are, indeed, so little utilized that as soon as the vowel is shortened they are nullified. So *bīḏ* and *bēḏ* will be homophones when two consonants follow the vowel, e. g. *bēḏha* = *bīḏha*. The sharp distinction made in several transcriptions, e. g. in Gairdner's texts, between *ī* and *ē* and *ū* and *ō* may partly be due to etymological considerations, partly, however, correspond to phonetic realities. The surrounding consonants naturally exercise their phonetic influence in this case, too. When *e* is preceded or followed by the velarized consonants it is modified in the direction of the mixed position (Gairdner, *Phonetics*, p. 40). The pronunciation of *o* after the velarizing consonants is somewhat lowered (Gairdner, *Phonetics* p. 42.)

The ultimate conclusion is:

The Eg.-Ar. has only the three short vowel phonemes of the classical language, viz. *a*, *i*, *u*. But it has five long vowel phonemes, viz. *ā*, *ē*, *ī*, *ō*, *ū*. The short *i* has the two long correspondences *ī* and *ē*, the short *u* the two long correspondences *ū* and *ō*. If we had a linguistic system *without* any relevance of vowel quantity we would have five vowel phonemes, viz. *a*, *e*, *i*, *o*, *u*. In this system *e* and *o*, regarded as *phonemes*, would only occur as phonetically long vowels, the others both as short and long vowels. This may, indeed, be the correct way of interpreting the phonetics facts phonematically, since the relevance of vowel quantity is more than questionable.

With a view to illustrating the practical consequences of the above discussion and its results I now give a phonematic transcription of the first anecdote in E. E. Elder, Egyptian colloquial Arabic reader, London 1927. In this transcription the stress is noted in all cases, the vowel quantity only in stressed, open, non-final syllables of the type *'kātīb*. The vowel in the stressed syllable is *long* before one consonant, *short* before two consonants. An unstressed vowel is always short.



## iṣ-ša'wiš il-ḡa'sim.

'kan 'marra 'waḥid ša'wiš ḡḡ g'did mil 'ar'yaf. wi 'lamma 'kan fi-šugli' fi-l-kara'kon wa'a'fu 'at-tili'fon 'ala'san 'yahud il-iša'rat. fa 'marra mi-l-mar'rat lamma 'da' il-ḡaras 'wāḡā' is-sam'mā 'ala 'widnu wi'al: "'Min" fa "al-lu: "'āna-l-ḥikim'dar." 'am 'rāma-s-sam'mā a min<sup>2</sup> 'idu w-iḡda tā'zim, wi 'sab il-ḥikim'dar min 'ger 'fayda.

## V. The phonematic diphthongs.

From a phonetic view-point the diphthongs are treated by Gairdner, Phonetics p. 45. For the classical language he rightly assumes two diphthongs or diphthongal sounds, viz. *ay* (*aj*) and *aw*. But in the dialect he supposes 4 diphthongs, viz. *ai*, *au*, *vi*, *vu*. The 3. and 4. are, however, merely combinatory variants of the 1., resp. the 2., so that we have only two *phonematic* diphthongs. Whether Gairdner is right or not when he assumes another pronunciation of the dialectal than the classical diphthongs, is of no interest from a phonematic point of view.

There is, however, one question of real interest. We know that the classical diphthongs are replaced by *e* and *o* in the dialect. According to Gairdner *all* classical diphthongs are so replaced. In return the colloquial has developed *new* diphthongs as a consequence of elisions of short vowels, e. g. in *šailu* "carrying him" < \*šā'ilu; 'auzu "wishing it" < \*'āwuzu. But Gairdner is scarcely right when he supposes that the first syllables of words like *baiyit* "pass the night" and *dauwar* "turn" represent new diphthongs. They may have been diphthongs as early as in the classical language: *baiyata* and *dauwara*. In that case we have to admit that not *all* classical diphthongs are

<sup>1</sup> The auxiliary vowel (*i*) after this word only serves the aim to avoid 3 successive consonants and has no phonematic value.

<sup>2</sup> Note that the accented *min* has long *i* and means "who", whereas the unaccented *min* has short *i* and means "from". That does not imply that there is any phonematic opposition between *i* and *i*. Synchronically the vowel quantity is dependent on the stress. The same opposition exists between the unaccented *fi* "in" and the accented *fi* "there is" < *fih* (pause), *fih* (context).

replaced in the dialect. When the last element was followed by the corresponding consonant, i. e. when in the classical language the last element appeared geminated, the diphthong was preserved in the dialect. In other words: *ayy* and *aww* are preserved, not *ay* and *aw*. The preservation of the old diphthongs in these cases is easily understood.

But then there are cases with preserved *aw*, which cannot be explained in that way, viz. the passive participles in the 1. form of verbs with 1st radical *w*, e. g. *maw'šul* "connected", *maw'id* "promised" *maw'ūš* "listener of a sermon". In a word like *maw'ūš* we clearly have a loanword from the literary language. For the dialectal correspondence of old *š* is not *ṣ*, but *ṣ*; see below p. 54 f. But this explanation cannot directly hold good for many rather common and generally used participles of these verbs. Additionally it is not easily understood how a new phoneme like *aw* should arise in so many words only through literary influence. Here we have to take into consideration the fact mentioned above that the dialect itself developed new diphthongs *aw* and *ay* through elision of short vowels. This elision must have taken place in Stage IV; see above p. 26. From that stage nothing prevented words like *maw'šul maw'ūš* etc. to be taken up in the dialect from the literary language in great quantity. For they did not introduce any new phoneme at all! It must, therefore, be assumed that before Stage IV the dialect scarcely possessed any passive participles in the 1. form of the verbs in question. On the whole, many of the passive participles now existing may be very old loans from the literary language.

A special problem is presented by the imperf. of the verbs with 1st radical *w*, such as *'wišil*, *'wi'if* *'wi'ūd*, *'wāḡā*. In the imperf. all of them, except *'wi'i* and *'wi'if*, are quite regular. But then the 1. p. sg. should sound *'awḡā* etc. Thus we should have an old *aw* preserved in these cases, too. But things are not so simple. As a matter of fact, also this *aw* is secondary. The original imperf. form of *wāḡā* etc. is not *yiwāḡā* etc., but *'yūḡā* etc. etc. Such forms really still exist as alternative forms. In my "Akzent und Vokalismus in Althebräisch", Oslo 1949, p. 90 ff., I have shown that forms of that type must be relicts from a very old flexional system, while the forms *yiwāḡā* etc. represent an adaptation to the regular flexional system of the imperf. of the verbs 1st radical *w*. In the old system the 1. p. sg. sounded \*'ūḡā, not *'awḡā*. Spitta-Bey, p. 223, where 3 different



kinds of flexion are enumerated, has partly confounded the two systems; for a form like *awšal* "I shall arrive", does not belong to the paradigm *yāšal*. It belongs to *yūšal*. Gairdner, *Egyptian Colloquial*, p. 127, has kept the two systems apart. By the way, I do not understand how Spitta-Bey can note *auqaf* (= *aw'af*) as the 1. p. sg. imperf. of the verb *wiqif* (= *'aw'if*), while Gairdner has only *a'af*, the apocopated form.

Thus we can draw the conclusion that the *aw* of forms like *awga'* must be regarded in connection with other words presenting the reintroduction of *aw* into the dialect. That this view-point is correct is shown by the dialectal facts concerning the IV. form of the verbs in question. Here we should, of course, have *aw-* in the first syllable. But the form is very infrequent. Spitta-Bey, p. 224, does not know more than 3 verbs of which the form occurs. The one word, *awgab* "necessitate", also sounds *'ugab*. For another word, *aw'ad* "he has promised", we have the alternative form *wa'ad* (I. form). Only in one word it occurs without any alternative form, and this word is *awhaština*, a phrase of politeness "you have made us desolate (through your absence)". The form *'ugab* no doubt presents the specific dialectal system. The forms with *aw* must be interpreted as due to the later stage of development, when *aw* was reintroduced, i. e. they must be understood in the same way as *mawšal* etc.

Conclusively it must be maintained that the diphthongs *aw* and *ay* have gone through 3 stages in the Eg.-Ar. In the first stage they disappeared completely and were replaced by *ō* and *ē*. In the second stage new diphthongs appeared. And in the last stage many of the old diphthongs were reintroduced.

## VI. The phonematic consonants.

The Arabic consonants are phonetically classified and described by Gairdner, *Phonetics* p. 9-31. A rearrangement of the consonantal system of the Eg.-Ar. according to functional, *acoustic* view-points would perhaps be very interesting. But unfortunately I find the task too difficult, since I know too little of this latest phase of functional linguistics and am on the whole no specialist of general theoretical linguistics.

Of greater interest is the relation of the present dialectal system to that of the 'Arabiya. Firstly we detect that some old phonemes have disappeared. Thus the old fricative dentals *t* and *d* have coalesced with the corresponding plosives *t* and *d*. The fricative velarized alveolar *d'* coalesced with the corresponding plosive *d*. The alveolar fricative *ḏ* is substituted by the velar plosive *g*, except in Upper Egypt and Soudan, where the old consonant is preserved.

Thus we clearly see a certain tendency of the Eg.-Ar. in the direction away from fricatives towards plosives, a tendency common to several Arabic dialects, to Aramaic, and also often met with in other groups of languages than the Semitic group. The functional consequences of the coalescences are of little importance. The substitution of *ḡ* by *g* has no functional consequence at all, because *g* did not exist in the old language. And the occurrence of the fricatives *t*, *d*, and *ḏ* was so infrequent that their coalescence with *t*, *d* and *d'* could not lead to many coalescences of originally different words.

Of another character is the disappearance of the uvular, unvoiced plosive *q* and its coalescence in Cairene with the plosive, unvoiced "glottal stop" (*ʔ*). In Upper Egypt and Soudan *q* is replaced by *g*. But in these dialects the old *ḡ* is preserved, so that a coalescence of old *q* and *ḡ* has not taken place. On the contrary, the disappearance of *q* has had no functional consequences in these dialects; for *q* is replaced by a phoneme not existing in the old language. Nor has, as a matter of fact, the Cairene substitution of *q* by *ʔ* lead to any important coalescences of words with originally different meanings, because the old *hamza* in most cases has been elided. As a final consonant after a long vowel it was elided as early as in Stage II. Within the word in cases like *\*šā'ū > šaiū* it must have been elided in Stage IV. As initial consonant it has no function and is pronounced very feebly. Through the influence of the literary language the original phoneme *q* successively seems to be reintroduced into the dialect.

The different ways of treating the old *q* in Cairo, Upper Egypt, and Soudan lead to the conclusion that the old phonemes *q* and *ḡ*

<sup>1</sup> This Proto-Semitic sound must still have existed in the Arabic introduced into Egypt. In any case it is found in eastern dialects; see Gairdner, *Phonetics* p. 21.



must have existed for some time after the introduction of Arabic into Egypt. The three phonemes *ʔ*, *ǧ* and *q* must at least have been kept clearly apart, since they are still so in Upper Egypt and in Soudan, *q* being represented by *g*. For it can scarcely be maintained that the dialects of Lower and Upper Egypt have developed from two different old Arabic dialects. The two modern dialects must have as a basis one and the same Egyptian Arabic dialect. Their phonetic, morphologic, and syntactical structures seem to demonstrate that clearly. The substitution of *q* by *g* in Upper Egypt must have been completed in the 14. century, when Arabic was introduced into Soudan. But for the time being it seems impossible to fix any time for the transition *ǧ* > *g* and *q* > *ʔ* in Cairo.

These arguments necessarily lead to the supposition that the Eg.-Ar. *g* does not represent the old Semitic *ǧ*. The development in Egypt has gone from *ǧ* to *g*. Therefore Brockelmann, Grundriss I p. 122, cannot be right. Our arguments are supported in an interesting way by the genuine dialectal word for "face": *wīšš*. This word *must* have originated from *wāǧh*, not from *wāgh*. The latter word also occurs in the dialect in the meaning of "method" and must be considered a loan from the literary language.

The coalescence of *t* and *d* with *ʔ* and *d* no doubt must be due to the Coptic substratum, which did not possess the fricatives in question. The transition of Arabic *d* > *d* must probably also be seen as the result of the influence of the Coptic phonematic system. The same substratum must be the cause of the preservation of *ǧ* in the Saʿīdi dialect, since this Coptic dialect really possessed the fricative sound. In the Bohairic dialect it seems to have been replaced by the plosive *g*. Hence the transition of Arabic *ǧ* > *g* in Lower Egypt.

The transitions of the three fricatives *t*, *d* and *d* to the corresponding plosives is common to Lower and Upper Egypt and must have taken place spontaneously as soon as a special Eg.-Ar. dialect was being formed. But when the arabization of Egypt grew stronger and the influence of the literary language increased, the Arabic-speaking people of Egypt were confronted with the old fricatives as opposed to the corresponding plosives. The efforts of reproducing this opposition lead to an exaggeration thereof and consequently to

the result that the literary *d* became *s*, *t* became *s*. This was the only possible way if the opposition should be preserved within the existing system without creating any new phoneme. For the phonemes *s* and *s* were the extant *fricative* phonemes *nearest* to *d* and *t*. And when the *fricative* character of the two phonemes should be preserved a new coalescence with *s* and *s* was unavoidable. As to *d* the dialect did not possess any *fricative* phoneme corresponding to its dialectal equivalent *d*. Just as *d* was replaced by *s*, so *d* was replaced by the introduction of an uvularized *s*, the new phoneme *ṣ*, in order to keep the old opposition *d* : *d*.

Thus we get two different representations of the three old fricatives, one dental and one sibilant representation. The fact is mentioned by Gairdner, *Phonetics* p. 31. He gives nearly the same explanation as is given here, and then he adds: "that *within the same root*, the words with sibilant change are less common and more literary than those with plosive change, and that the more countrified the speech the more the former gives way to the latter." Gairdner also gives a number of examples, thus of the old root

*tlh*: *sālās* "Trinity", *ʔālāt* "3rd.", or  
*ǧnb*: *zanb* "sin", *dānab* "tail", of  
*ǧlm*: *ǧulm* "oppression", *ǧalma* "darkness".

But the influence of the literary language went much farther and appears in quite common words, even particles, e. g. in *ʔza* "when" from the classical form *ʔdā*; in *ʔsumma* "then" from the classical *ʔumma*; in *hēs* "because, in so far as" from the classical *hātū*. The last two words, it is true, are not very frequent. But they can scarcely have been introduced recently. For if *hēs* had been introduced after the shortening of long final vowels, it would certainly have kept the classical ending *-u*, since it never occurs in pause. Therefore the word must have been taken up in the dialect after Stage I, but before Stage III. The reintroduction of *summa* may belong to the time *after* the shortening mentioned, i. e. after Stage III. But it may also have taken place before that time and go back upon the regular old pausal form *ʔummah*; see above p. 11 f. Spitta-Bey



does not mention the word. As to *'isa* < *iḡā* its vowels follow the same rules as the vowels of other Eg.-Ar. words: \**'isa* in Stage I and II, *'iṣā* from Stage III on. In might perhaps be suggested that, when the word had been introduced before Stage IV, it would be subject to the tendency of lengthening the short accented *i*; see above p. 40 ff. But in any case it must have been introduced before the loss of the suffix *-h*. Else it would have sounded \**'iṣā* like *aṣ'yā*; see above p. 29.

## VII. Conclusions.

The Egyptian Arabic dialect has developed from the classical Arabic language, or a linguistic system with only slight differences from that language, through successive stages, each of which showing its own special structure. This structure appears especially clear in the word-endings:

1. All words ended in a long vowel or one or two consonants; that is the classical pausal system, which is the basis of the Eg.-Ar. dialect.
2. The final *hamza* and the final fem. *-h* after long vowels were elided, but the structure of word-endings remained unchanged.
3. All words ended in a short vowel or one or two consonants. The change was caused by the shortening of all long final vowels.
4. The stress had the effect that long unstressed vowels within the word were shortened and some short unstressed vowels in open syllables were elided or reduced. The structure of word-endings remained unchanged.
5. All words end in short unstressed or long stressed vowels or in one or two consonants. The change is caused by the elision of the suffix *-h* after long vowels. This system represents the present language.

The emphasizing of a syllable of a word by *accent* most probably was introduced in Stage II. But as late as in Stage IV this accent was dependent on the syllabic structure of the word. Only the opposition between long and short vowels, therefore, was relevant,

not the accent. But the latter successively grew more dominant. Certainly it would have changed the prosodic structure of the dialect had it not been counteracted by the growing influence of the classical language, which has remained the literary language. On the whole, the linguistic history of Egypt is marked by the influence from this language. It also appears in the system of *diphthongs* and *consonants*, in which old oppositions, which were lost in the dialect, are re-introduced.





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